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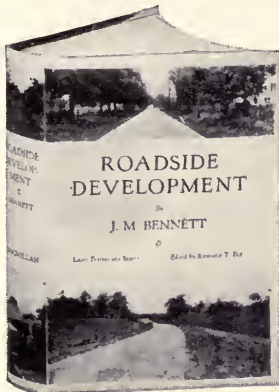
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JANUARY, 1931

No. 1

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HENRY VINCENT HUBBARD, EDITOR

HOWARD K. MENHINICK, ASSISTANT EDITOR

CONTRIBUTING EDITORS

EDWARD M. BASSETT

FRANK B. WILLIAMS

JOHN NOLEN

FLAVEL SHURTLEFF

THEODORA KIMBALL HUBBARD

CARL RUST PARKER, *Business Manager*

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CHESAPEAKE AND OHIO CANAL LOCK

This historic canal, bordering the Potomac River and built during the administration of John Quincy Adams, will be preserved in the Washington Memorial Parkway development

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PLANNING PROGRESS IN MARYLAND- WASHINGTON METROPOLITAN DISTRICT

By IRVING C. ROOT

City Planner, Maryland-National Capital Park
and Planning Commission

THE L'Enfant plan, prepared for the city of Washington in 1791, proved adequate for the needs of the National Capital for more than one hundred years, but the boundaries of this plan have been outgrown. Gradually the Washington of L'Enfant has become the central business and apartment district of a great city with single-family homes spreading out over the District of Columbia.

With the World War came a very urgent demand for more and yet more housing accommodations. The congested housing conditions of this period started a great wave of single-family home construction which quickly overflowed the Federal District and spread out over near-by Virginia and Maryland. The influx of new residents into suburban Maryland has proceeded at an ever increasing rate and evidently will continue to do so. The substantial nature of this rapid suburban development is indicated by an increase in the assessed valuation of property in lower Montgomery County from \$13,000,000 to \$54,000,000 in the last ten years. This increase largely reflects the construction of single-family homes, as there has been practically no commercial or industrial development.

The growth of population in suburban Prince George's and Montgomery counties has kept pace with the increase in property values and now numbers about 60,000.

This rapid suburban development brought officials of near-by Maryland to a realization that they were facing a major planning problem of increasing urgency. The National Capital Park and Planning Commission, already alive to the necessity of a planning program in suburban Maryland, kindly offered the services of their legal adviser, Mr. Alfred Bettman of Cincinnati, to aid in the preparation of a planning enabling act.

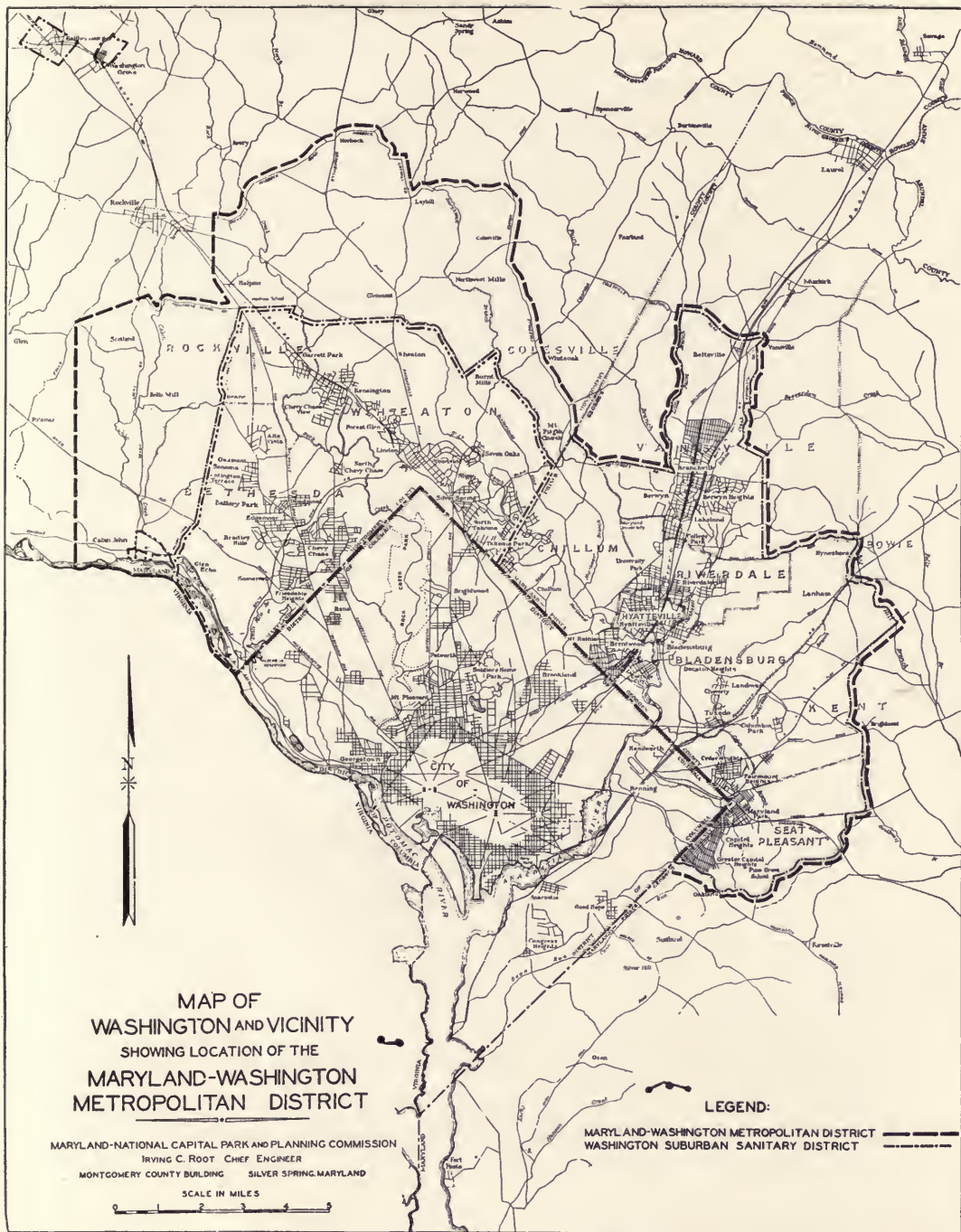
THE ENABLING ACT

This act, adopted by the Maryland Legislature of 1927, established the Maryland-Washington Metropolitan District and provided for the appointment of the Maryland-National Capital Park and Planning Commission, to consist of six members, three from Prince George's County, and three from Montgomery County, appointed by the Governor and confirmed by the respective County Commissions.

Ample authority is provided by the act for the adoption of a master plan, and for zoning, subdivision control, park development, establishment of building lines, and supervision of all street improvements. Authority is also provided for the administration of these various activities with penalties to insure adequate enforcement.

The Commission is financed by a tax levy of three cents on each 100 dollars of assessed valuation for administrative purposes. In 1930 this tax produced \$27,413.45.

In the Metropolitan District of Montgomery County a 7-cent tax is levied for park development and provision is made in the act for the issuance of bonds in such amount as may be retired by this tax in twenty years. This park tax amounted to \$39,350.30 in 1930. It is expected that park improvement bonds based on this tax will be issued in 1931. The County Commissioners of Prince George's County have similar authority but have not yet exercised it.



PRELIMINARY MASTER PLAN

The Metropolitan District borders the District of Columbia on the east, north, and west, and follows the Maryland-Virginia state lines for twelve miles along the Potomac River. The District is irregular in shape and varies in width from five to ten miles, so arranged as to include the sections of more active suburban development. The area of the District is about 160 square miles. Twenty-two incorporated towns and communities having a limited form of local government are included within the District.

A preliminary Master Plan has recently been completed for the Maryland-Washington Metropolitan District. This plan was given wide publicity in the local press and is now being studied by municipal authorities and local civic organizations. Suggestions for changes will be given careful study and, if considered of sufficient merit, will be incorporated. As soon as the plan is found to meet the approval of the public, it will be adopted by the Park and Planning Commission as the official Master Plan of the District.

The preliminary Master Plan shows a comprehensive system of existing and proposed main highways, carefully coördinated with a park system planned to penetrate and develop areas of particular park interest.

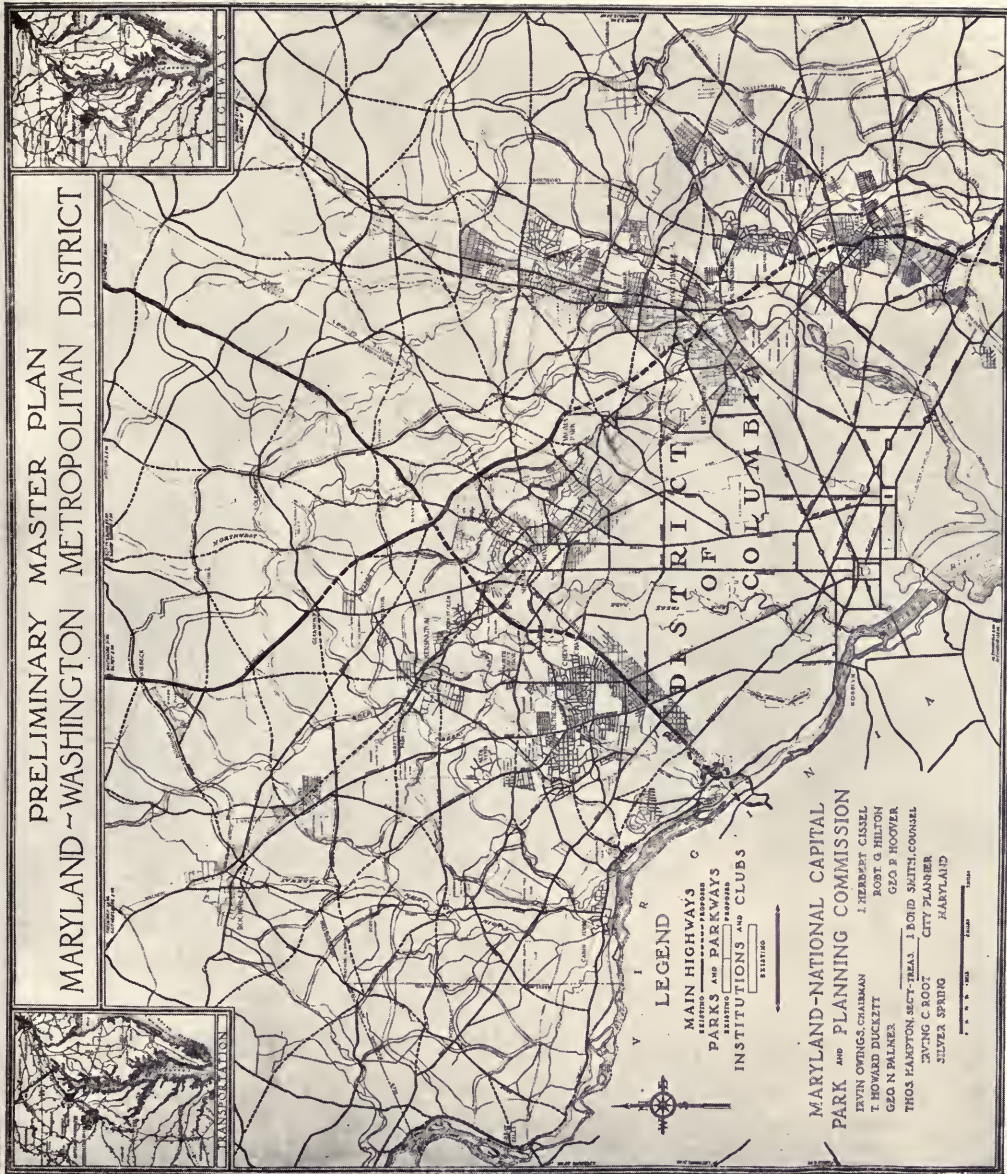
Due to the rough terrain in the Metropolitan District, which varies between elevations of 10 and 450 feet, it was necessary in all park and highway locations to make a careful study of grades. This work was greatly facilitated by the excellent government maps showing 10-foot contours and by airplane photographs.

MAIN HIGHWAYS

The Metropolitan District is well provided with radial main highways but the situation with regard to existing cross-county highways east and west is quite the reverse. These roads are poorly located and inadequate in number and, as many stream valleys must be crossed, the construction of this portion of the highway system will be relatively expensive.

Included in the Master Plan highway scheme are two important by-pass routes. One of these routes will carry through traffic

PRELIMINARY MASTER PLAN MARYLAND-WASHINGTON METROPOLITAN DISTRICT



MAIN HIGHWAYS OF THE METROPOLITAN DISTRICT
Two important by-pass routes are shown by heavy lines

on U. S. Route 1 around the city of Washington on the west, and the other will by-pass traffic traveling between the West and southern Maryland.

The designation of main highways on the Master Plan indicates that the improvement of such existing or proposed highways will be given precedence over other public ways in the locality. Thus, the construction of the more important features of the Master Plan highway system will be definitely scheduled to insure their completion within a relatively short period.

Highways shown on the Master Plan will have right of ways 80, 100, and 120 feet wide depending upon their importance. The established right of ways are now being secured as new real estate subdivisions bordering these highways are platted. As the zoning ordinance requires a minimum front setback of twenty-five feet in residential zones, the actual distance across the highway between building fronts will be the highway width plus fifty feet. The building line for stores in neighborhood commercial areas is required to conform to the residential setback.

The first highway planned and built in accordance with the Master Plan highway system was opened for traffic in 1930. It is approximately four miles long, and connects by a direct route three important suburban communities,—Bethesda, Chevy Chase, and Silver Spring. For the greater part of its length this highway is built on a new right of way 120 feet wide which, with the exception of two small parcels, was secured by donations of land. A concrete pavement twenty feet wide has been laid with 10-foot earth shoulders on each side. The various bridges were built with a 40-foot paved roadway to provide for future highway widening, and 5-foot sidewalks.

Two grade separation structures were built in connection with this highway: one, a concrete bridge over the Baltimore and Ohio freight line at Bethesda, and the other, an attractive, granite-faced pass under the Baltimore and Ohio main line at Silver Spring. Two other grade separations in the District have been completed, funds have been appropriated for two more, and still others are planned, especially in connection with the Master Plan of highways.

PORTALS TO THE DISTRICT OF COLUMBIA

Suitable park treatment to demarcate and embellish the main highways at the Maryland-District of Columbia line has been the object of coöperative planning by the National Capital and Maryland Park and Planning commissions. The former has prepared attractive plans for the treatment of Sixteenth Street at the Maryland line and for Chevy Chase Circle on Connecticut Avenue. Preliminary plans for land takings have been prepared jointly



Underpass, Bethesda-Silver Spring Highway

for the portal treatment of Massachusetts Avenue, Wisconsin Avenue, and Piney Branch Road.

The Master Plan park system is described in a following article by Mr. Roland W. Rogers.

SUBDIVISION CONTROL

The enabling act specifically states that plans for the location and improvement of all streets and highways shall conform with the Master Plan. The act gives the Commission complete subdivision control, with authority to establish its own rules and

standards. Approval by the Commission in writing is required on each subdivision plat before it will be admitted to the county records, thus preventing the recording of plats that might later become community liabilities rather than assets.

A preliminary plan is required for each new subdivision. Due to irregular terrain a topographic survey is often necessary as a basis for the preliminary plan. In some cases, before the preliminary plan is approved by the Commission, proposed street lines are "rough staked" or "flagged out" to insure their proper location and drainage.

The final subdivision plat is presented on tracing cloth from which reproductions are made for county and other records. The original drawing is retained by this Commission and filed for safe-keeping.

In the design of the subdivision definite standards are required. Residential lots must have a minimum area of 5000 square feet and a minimum width of 50 feet at the building line. A minimum street width of 50 feet is required except in special cases which warrant a variation. Alleys are required at the rear of all commercial lots.

Strict regulations govern the engineering field work incidental to subdivision development and the presentation of survey data on the final subdivision plats. All subdivision plats are required to "tie in" by coördinates to a system of bench marks which are conveniently located at frequent intervals throughout the Metropolitan District.

The 1929 Maryland Legislature amended the enabling act, giving the Commission authority to provide engineering services at cost in connection with subdivision development. So far the service rendered by the Commission has consisted of aid in the preparation of the preliminary subdivision designs upon the request of the property owners. Often in planning local commercial centers it has been possible to secure a distinctive grouping of store sites with ample setbacks, parking space, service courts, and opportunities for landscape treatment, all of which add to the value of the property.



CHESAPEAKE AND OHIO CANAL

Plans for the Potomac River park project include development of this canal for recreational purposes

ZONING

Two zoning ordinances, identically alike in text, were prepared by this Commission and adopted in 1928 by the County Commissioners of Prince George's and Montgomery counties, respectively, for the portions of those counties within the Maryland-Washington Metropolitan District. These ordinances were based upon the type of ordinance in operation in the District of Columbia for the express purpose of securing a similarity of development. However, after two years of administration, it was found that the zoning problems of a suburban region are quite different from the requirements of a great city. Therefore, to meet suburban requirements more satisfactorily and to take advantage of recent court decisions, revised ordinances were prepared and have recently been adopted.

The revised zoning regulations for the Maryland-Washington Metropolitan District require the assent of the respective County Commission prior to the location in residential areas of such uses as aviation fields, children's homes, private clubs, hospitals, orphanages, and private schools. Such assent may be given only after public notice and hearing, and by the adoption of an ordinance. Thus, these various uses may be located without injury to the character of established communities.

The complete absence of apartments in the Metropolitan District has permitted greater freedom in establishing standards. Each apartment structure must be completely surrounded by open space, and a minimum lot area of 625 square feet per family is required. The minimum front setback of 25 feet and minimum side yards of 8 feet for a four-story structure are increased with increased building height. It is hoped that the standards established for apartments will limit the construction of these buildings to the so-called "garden apartment" type. Plans for several garden apartment developments in the Metropolitan District are now in course of preparation.

Commercial signboards have been restricted to industrial zones. The only exceptions to this rule are signs in commercial

zones advertising the general business conducted on the premises, and real estate signs which may be erected subject to a temporary permit.

All building permit applications within the Metropolitan District must show the approval of the Commission as to zoning requirements before the building permit is issued. Thus, the Commission, due to its close touch with building construction, is often able to prevent the blocking of important planning projects.

With the remarkable example of park and planning accomplishments of the National Capital near-by; with a large suburban area of great natural beauty on the threshold of development; with ample legal authority to secure the realization of comprehensive plans; and with a full realization, by local authorities, of their opportunities and responsibilities, a great future may well be expected for the Maryland-Washington Metropolitan District.

In general, we must recognize that the main end of the planning movement is to promote a more abundant life for our people, our greatest economic asset. To this end we need the conscientious coöperation of our technicians, of people who are giving generously of their time to this great movement, and of all socially minded people everywhere.

A town, a city, or a region that is not functionally efficient labors under a terrific handicap of wasted time, inconvenience, and loss of life. The net result is that every place pays for good planning whether it has it or not. As you approach this problem for your communities and your region, remember that no structure has the permanency of the street and highway structure, and that no structure has an equal significance for the public welfare or is so expensive and difficult to change.

—GOVERNOR FRANK G. ALLEN *in address of welcome at the 1930 Annual Conference of the Massachusetts Federation of Planning Boards.*



PROPOSED PARK SYSTEM FOR THE METROPOLITAN DISTRICT

The recommended development includes 10,000 acres of land in eight major projects

A PARK SYSTEM FOR THE MARYLAND-WASHINGTON METROPOLITAN DISTRICT

By ROLAND W. ROGERS
Landscape Architect, Maryland-National Capital Park
and Planning Commission

MANY great enterprises have grown from very small beginnings. Such we hope will be the case with the proposed park system for the Maryland-Washington Metropolitan District.

No structure can outgrow its foundation without materially shortening its life, and for this reason tentative plans have been prepared to cover the growth of the park system for many years to come. The Maryland-National Capital Park and Planning Commission plans eventually to set aside as park or parkway areas all of the main stream valleys and many of the less important ones as shown on the Master Plan on the opposite page.

These valleys, which include a wealth of natural scenery, lend themselves very well to a coördinated scheme with the present system of parks in the District of Columbia as a nucleus. The main valleys radiate at fairly regular intervals from the vicinity of the city of Washington, and the lesser valleys approach each other so closely in many instances that the whole system may be linked together by using in almost every case only such land as is unfit for building purposes. Because the floors of these valleys are subject to spring floods and the enclosing hillsides are often very rocky and much too steep for houses, it is hoped that much of the land desired for park use will be donated by the owners when needed or as the property is subdivided. In most cases the park areas will be bounded by border roads which will afford the adjoining property owners park boulevard frontage and thereby materially increase the value of their land for real estate purposes.

The areas designated as parks or parkways on the Master Plan were studied on an enlargement of the excellent geological survey prepared by the Federal Government for Washington and vicinity. The border roads were located to conform to topography and to maintain easy grades.

GENERAL PARK PLANS

In addition to the Master Plan there have been prepared several general design plans for individual park areas, notably two sections of Rock Creek Park and two sections of the Sligo Creek Parkway. The first section of the Rock Creek Park plan, shown on the opposite page, illustrating the extension of the present park in the District of Columbia into Maryland, has received the official approval of our Commission and that of the National Capital Park and Planning Commission. The boulevard on the west side has been located on the ground from the District line to Connecticut Avenue and land is being acquired for the right of way and park area. It is believed that the rough grading on the road as far as the new Bethesda-Silver Spring Highway can be started this winter. The Federal Government has about six-tenths of a mile of connecting road to build from the District line to one of the existing park roads, but it is expected that this will be constructed in the near future.

General plans have been drawn for the future development of a third section of Sligo Creek Parkway, two sections of Cabin John Parkway, and several individual smaller parks in built-up districts not served by other park projects. Landscape design and planting plans have been prepared for the grounds of several public buildings, and suggestions given for the development of the grounds of others.

THE CRAMTON-CAPPER BILL

The park movement in the Metropolitan District was greatly stimulated by the passage of the Cramton-Capper Bill,¹ approved May 29, 1930, at the last session of Congress. For the purchase of park lands in near-by Maryland this act provides the sum of \$4,500,000,—a figure arrived at by an actual estimate of the probable value of the land as determined from the tentative park plans. When appropriated by Congress, the money may be used for land purchase in any of the valleys of the following streams: Cabin John River, Rock Creek, Sligo Creek, Northwest

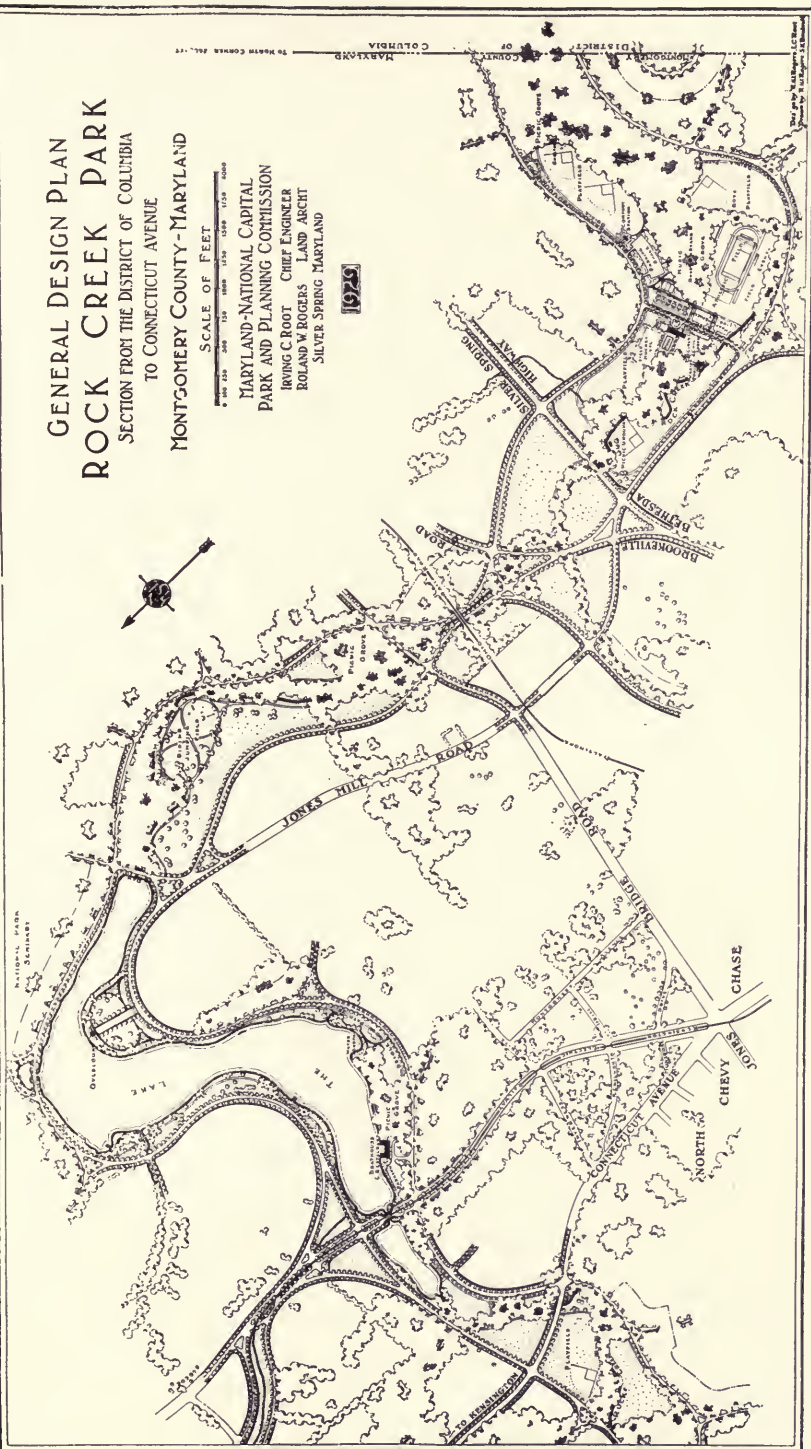
¹An act for the acquisition, establishment, and development of the George Washington Memorial Parkway (Public No. 284).

GENERAL DESIGN PLAN ROCK CREEK PARK SECTION FROM THE DISTRICT OF COLUMBIA TO CONNECTICUT AVENUE MONTGOMERY COUNTY-MARYLAND

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MARYLAND-NATIONAL CAPITAL
PARK AND PLANNING COMMISSION
IRVING C. ROOT CHIEF ENGINEER
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SILVER SPRING MARYLAND

1929



Branch, the Anacostia River, and Indian Creek, but only in areas which have been officially designated as parks by the Maryland and Federal commissions.

Eight years after the money has been appropriated for this purpose two-thirds of the amount must be repaid the United States Government by the agency which committed itself to this responsibility before the money was made available. In this case the Maryland-National Capital Park and Planning Commission will hold itself responsible for the refund even though some of the money may come from the State of Maryland or from Montgomery County. No interest is to be charged during these eight years but none of the money may be used for the building of roads or otherwise improving the park areas, as this work must be done by the Maryland Commission. It has been decided, however, that a fair purchase price shall be established by a board of appraisal for all property donated to the Commission, and that the Commission shall be allowed one-third of this price from the Cramton-Capper Bill funds for development purposes. For this reason an intensive campaign will be waged to secure as much land as possible by donation so that the park areas may be developed soon after the land is acquired. It is expected that by these means some 10,000 acres of very desirable land will be secured before the growth of the city of Washington has caused it to increase materially in value. Title to this land is to be vested in the State of Maryland, but the jurisdiction and development of it are to be in the hands of the Maryland-National Capital Park and Planning Commission.

The Cramton-Capper Bill also provides for an extensive park along the Potomac River from Mt. Vernon to Great Falls. This is to be known as the George Washington Memorial Parkway and is to be largely a Federal project. It has been designed to include and thus give public control over both banks of the river in Virginia and Maryland, as well as in the District of Columbia between Mt. Vernon and Fort Washington to the south and Great Falls to the north. To acquire such control the act authorizes the appropriation of \$7,500,000, and Congress has already appropriated \$1,000,000 which may be spent for land when definite commit-

ments have been received from "the State of Maryland or Virginia, or political subdivision thereof, or from other responsible sources, for one-half the cost of acquiring" the land.

The State of Maryland or some other responsible source is therefore expected to reimburse the Federal Government at the end of eight years for one-half the cost of purchasing the necessary land for this project within the state. The whole cost of maintaining and policing the park areas after acquisition will be borne by the Federal Government.

INITIAL PROGRESS

Independently of the provisions of the Cramton-Capper Bill and pending the time when the money provided thereby shall be appropriated, the Maryland Commission has made an actual start in the development of the park system. To date this work has consisted in the construction of one neighborhood park and one community playground and the partial completion of about a mile and a quarter of park road. The funds for this work were made available by the State Act of 1927 which created the Commission. This act provided for a tax levy of seven cents per each one hundred dollars of assessed valuation of property within that portion of the Metropolitan District located in Montgomery County. The money so raised is collected by the County Commissioners and turned over to the Park and Planning Commission for use in the purchase, development, and maintenance of park land.

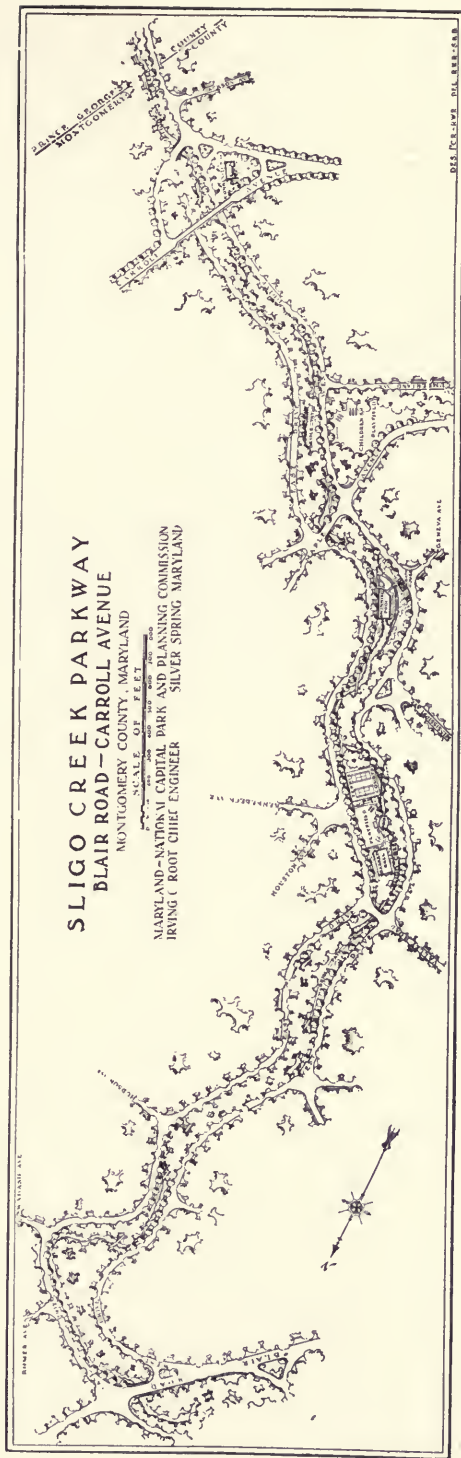
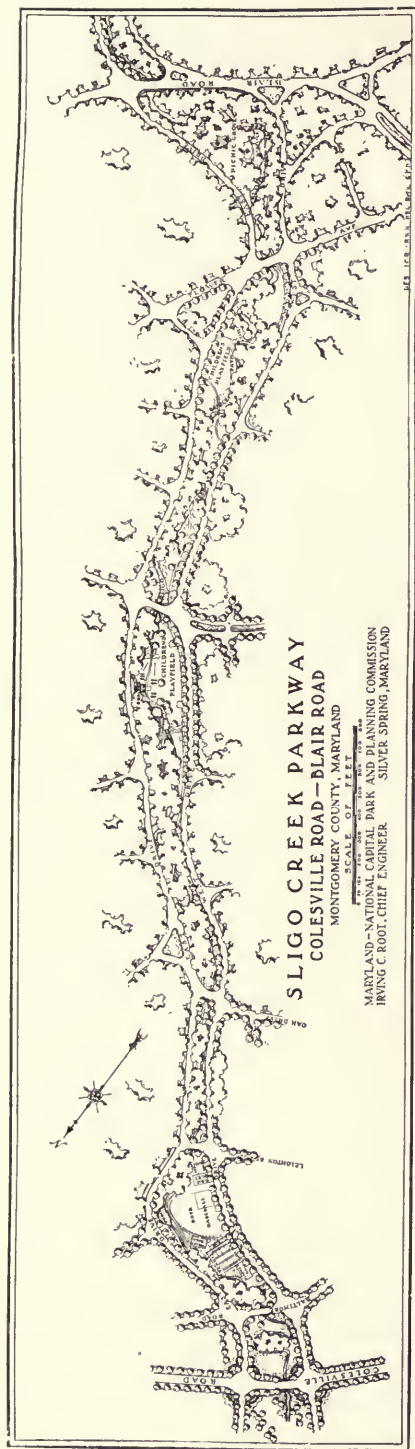
The Commission is also authorized to issue such bonds as may be retired by this tax levy at the end of twenty years, and in this way approximately one million dollars could be provided as partial payment of the money advanced by the Cramton-Capper Bill. Until such money is advanced, however, the Commission plans to use the tax money to the best advantage with the assurance that all money expended from this source for park land purchase in authorized areas will come under the terms of the Cramton-Capper Bill. The County Commissioners for Prince George's County were also authorized by the State Act of 1927 to levy a seven-cent park tax, but they have not done so, and until they do, no park plans

or construction work may be started in that section of the Metropolitan District and probably no participation in the funds made available by the Cramton-Capper Bill can be arranged.

The park road which is nearing completion runs along beautiful Sligo Creek for a distance of more than a mile. It includes the East Drive from Blair Road to Maple Avenue, the West Drive from Mississippi Avenue to Maple Avenue, and the connecting piece of Maple Avenue between the ends (illustrated opposite in the Blair Road-Carroll Avenue section of Sligo Creek Parkway). The road was designed as a pleasure drive with an eighteen-foot waterbound macadam surface; since it is not possible to provide parking off the right of way, the wheel way is widened on each side by a five-foot earth shoulder to provide automobile parking for those who wish to stroll or picnic.

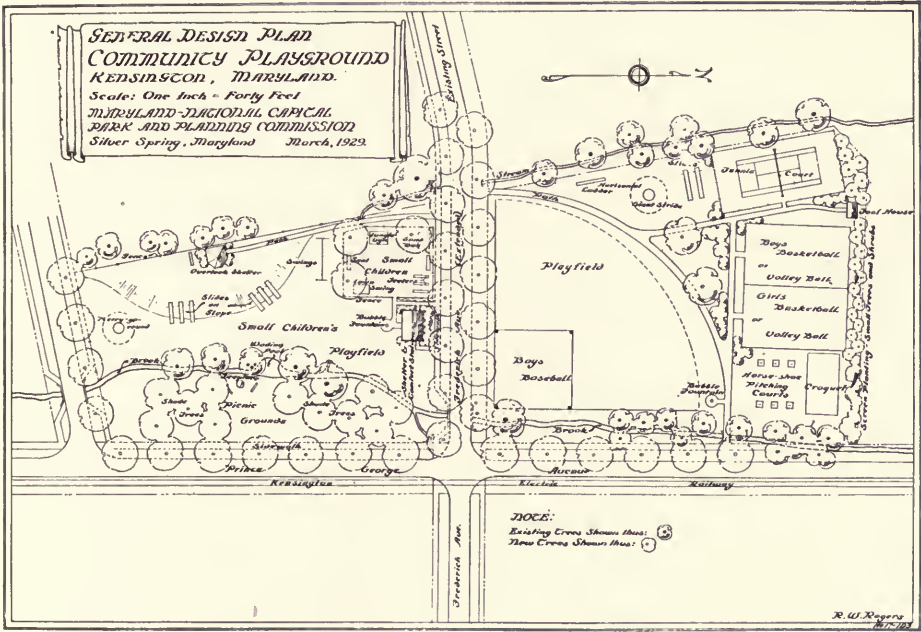
The creek valley is so narrow at places that, in order to preserve the stream bed and avoid an excessive side-hill cut in almost solid rock, it has been found necessary to construct masonry retaining walls to support the road. The culvert head walls are also of masonry. All construction work has been planned to blend with the landscape as much as possible. The valley is very attractive throughout as the stream is bordered by large weather-beaten boulders, and the almost precipitous hillsides and occasional level bottoms are covered with a fine stand of large oaks, beeches, tulip poplars, and sycamores, with a lower growth of flowering dogwood and mountain-laurel.

Almost all the land necessary for the road and the park area along the stream has been donated by adjoining property owners or the Town of Takoma Park which had purchased some of it at tax sales. None of the cost of building the present road will be borne by the abutting landowners, but it is expected that the increased valuation of the house sites brought about by its construction will bring additional returns from the tax levy. Thus the first mile of what is expected to be an extensive network of park roads opens up a most attractive bit of natural scenery which has long been popular as picnic grounds.



and Planning Commission was petitioned by the Mayor and Council of Kensington to render a like service to that town, and offered the "Meadows" for such a use. A favorable answer was given, the land was deeded to the Commission, and actual work was started last June.

With these small though significant beginnings behind them, but with a very ambitious program and the power to attain that



program ahead of them, the Maryland-National Capital Park and Planning Commission and its small group of workers face the future with the determination to develop a park system equal to the finest in the country.

We know that open air and sunshine and opportunity to play are vital to community well-being. However profitable in dollars and cents parks have proved themselves through their favorable effect on land values, their greatest contribution has been an unmeasurable social one,—recognized in the sixties when Central Park first came into use, and confirmed a hundred times over every day in cities where a balanced system of rural and neighborhood parks gives each citizen, young and old, his meed of relaxation and healthful exercise.—From OUR CITIES TO-DAY AND TO-MORROW.

PRINCIPLES WHICH SHOULD CONTROL LIMITATIONS IN BULK OF BUILDINGS

A Discussion Applying to Districts where Great Intensity of Building is Most Justifiable, Especially Manhattan

By FREDERICK LAW OLMSTED

IN districts where great intensity of building is most justifiable, especially in Manhattan, the limitations under the police power of bulk of buildings should permit the greatest possible flexibility in design to suit the needs which each is built to meet as far as is consistent with the following requirements.

The limitations should be such that if every parcel of land in separate ownership were built upon to the maximum permitted by the regulations,—that is to say, if each owner exercised his full equal rights under the law,—the resulting masses of buildings at various levels above the ground would not be of such a size or so closely crowded together that (1) any considerable part of the habitable space in any building would have a supply of light or air so insufficient as substantially to neutralize the advantages of the location in the district or create working conditions seriously injurious to health and efficiency, or (2) that the load upon transportation facilities would be greater than could be met by means known to be technically and economically feasible and without subjecting the users of the district to hardships in transportation so great as substantially to neutralize the advantages of location in the district or seriously impair their health and efficiency.

No absolute limitation of height would be necessary, but merely such revision in detail of the present bulk regulations of the New York zoning ordinance as experience and study show to be necessary for accomplishing the purposes above stated. Experience has clearly demonstrated that the present regulations do not accomplish these ends. This is strikingly illustrated by the fact that owners of large buildings are finding it expedient to acquire “air rights” over surrounding property at large expense in order to supplement the modicum of protection afforded by the limitations which the zoning law places upon the extent to which buildings on adjacent lots might cut off their light.

A SUGGESTED METHOD

In recognition of this practice of acquiring "air rights" and in order to increase flexibility in building design and in financing, it is suggested that the area of any parcel of land which may be occupied by buildings at any given height above the street level be made to relate not merely to the size and shape of the parcel of land in one ownership on which the building is erected and to the width of the adjoining street (considered as a permanent open space extending upward indefinitely from the street level), but also to the size, shape, and location in relation to the building of any other adjoining spaces permanently restricted against occupation by building at or above any given level, regardless of the ownership of the land under such spaces,—as, for example, by the dedication to the public for perpetual maintenance as open spaces of "air rights" above certain specified levels, on adjacent lands. Thus for the purpose of computing the permissible volume and location of building masses on a given lot above the height of (say) sixty feet above the street, the lot could be reckoned as extending beyond the actual boundaries of fee ownership in proportion as adjoining lands (other than streets) are subjected to an absolute building height limit of not more than sixty feet, etc.

For the purpose of maintaining a reasonable proportion between building masses and open spaces properly diminishing at successively increasing levels above the streets so as to secure a reasonable amount of light at all levels, and for the purpose of reasonably limiting the average total bulk of building per acre in relation to possible facilities for transportation, it is immaterial to the public on whose land the higher building masses occur and on whose land there occur lower building masses or none. Under such a system as suggested above landowners who did not value highly the right to build at the higher levels to the average maximum fixed by law for all, would for a moderate compensation waive those rights permanently in favor of increasing the bulk of building which could legally be erected at the higher levels on adjoining property whose owners valued those rights more highly and would pay for the increase; but such local increase would not increase the

total bulk of high building in any area to the point where it would produce serious economic or social losses. So long as the zoning regulations do not definitely require a sufficiently increasing amount of open space around building masses erected to increasingly greater heights above the general plane of low buildings to ensure permanently adequate light to all habitable building space, the city will be liable to three evils: (1) Those who first build to any of the higher levels at approximately the maximum area allowed by law will, at least for a time, secure an inequitable advantage by obtaining light and air at the expense of their near neighbors. (2) These neighbors may turn the tables on the former by so building as to shut off the light and air of the first high buildings to a seriously injurious degree, often to an economically disastrous degree, although themselves subject to the same calamity. (3) Neighbors may, in effect, extort blackmail for "air rights": that is, for refraining from such economically destructive though legally permissible competition.

If, on the other hand, the zoning regulations, while permitting unlimited height of building, require a sufficiently increasing allotment of open space at successively increasing levels to maintain a reasonable access of light to all levels and to avoid excessive overloading of transportation facilities, it will become a matter of fair bargain and sale as to which properties utilize the limited permissible volume for building at the higher levels and which supply the required attendant open spaces at those levels, so far as both are not supplied on the same property, which can be done only where the fee ownership is consolidated into very large parcels.

ELIZABETHAN TRAFFIC DIFFICULTIES

It chanced on a time as (the king) rode from London (westward) he met with a great number of wains, laden with cloth. And seeing them still drive one after another, he demanded whose they were. The Wanemen answered, "Cole's of Reading," quoth they. Then by and by the king asked another, saying, "Whose cloth is all this?" "Old Cole's," quoth he. And be it remembered that the king met them in such a place, so narrow and straight, that he with the rest of his train were fain to stand close to the hedge whilst the carts passed by, the which being in number about two hundred, (it) was near an hour ere the king could get room to be gone.—From early records relating to wool transportation. Courtesy of HENRY COPLEY GREENE and ARTHUR A. SHURCLIFF.

THE LONG-TERM FINANCIAL PROGRAM AS AN AID TO CITY PLANNERS

By A. E. BUCK

National Institute of Public Administration

AFTER a relatively short experience covering little more than a decade, the long-term financial program is being more or less generally accepted by students as a necessary feature in the process of financing city government. Annual planning, as commonly exemplified in the budget, is too shortsighted to meet more than the current needs of a municipality. A look ahead with respect particularly to capital requirements—that is, a financial forecast for five or ten years—is necessary to provide for the systematic development of any urban community. This fact, however, is not yet widely appreciated either by city planners or by city administrators and finance officers.

City planners are undoubtedly beginning to awaken to the need for long-term financial planning in connection with their proposals for the physical development of the municipality. But some of them are not yet fully aware of the importance of such planning. They do not seem to realize that a comprehensive plan of city improvements is incomplete without a financial program to carry it into effect: in other words, that such a plan must be adequately financed, not merely for a year, but for a much longer period, if it is to be realized. This seems to account for the fact that several elaborate city plans have turned out to be mere “paper” proposals, —interesting to contemplate but impossible to carry out, since they were not supported by long-term financial programs.

City administrators and finance officers, on the other hand, do not yet fully appreciate the need for city planning in connection with annual budgeting and the more extended forecasting of fiscal requirements. In several instances, they have attempted to prepare (sometimes with the help of private research agencies) five- or ten-year financial programs without the aid of a comprehensive city plan, merely by scheduling certain improvement projects which appeared to be more or less necessary at the time. While this has

made it possible to work out something of an equitable distribution of the tax burden over future years, their programs have proved incomplete because they have not provided for all items necessary for a city's orderly and systematic physical development.

The present approach to long-term financial "programming" at once suggests that the city planner and the city administrator or finance officer ought to cooperate. One undoubtedly requires the aid and information of the other. The city planner should study the physical layout of the city and propose a comprehensive list of projects for its future development; the city administrator or finance officer should devise ways and means of paying for these projects without overburdening the taxpayers of the community or placing the city government in a position where it will be hampered or embarrassed in its future fiscal operations. A long-term financial program prepared in this manner would go far toward insuring the realization of the planning projects; indeed, it would have the maximum value from the standpoint of the city as a whole.

What is the purpose and scope of the long-term financial program? It is designed to stabilize the fiscal demands upon the city government arising principally from capital expenditures. It also helps to obviate avoidable borrowings for public improvements. Such program takes into account not only capital needs but also operating expenses and debt service. This is necessary in order to balance the projected outgo with the anticipated income for each of the years covered by the program,—that is, to produce a complete picture of the financial requirements of the city government.

In the preparation of a financial program, certain factors must be taken into consideration. One of these is the term of the program. This should be not less than five years. Experience would indicate that ten years is perhaps more satisfactory; at least, a greater number of programs have been prepared on this basis. Even much longer programs have been attempted in some cities, but these have been less accurate than the shorter ones and are therefore subject to greater changes in the course of their execution. It would seem better to stick to the shorter program, one of (say) five or ten years, annually adding a year to it so as to maintain continuously the same length of term. Although the city plan may

contemplate developments over a period of fifty years, it is neither necessary nor practicable for the long-term financial program to anticipate the same period in order to support the plan.

Once the term of the program has been decided upon, the next step is to gather the financial data for its preparation. These data relate to the population and the annual rate of growth of the city; the assessed valuation of real and personal property and its annual rate of increase; the outstanding bonded indebtedness of the city analyzed as to purpose, term, redemption, and interest requirements; the legal or practical debt limit of the city, and the borrowing margin for each of the years covered by the program; the current operating requirements of the various city departments and agencies; and the probable annual taxes and miscellaneous revenues of the city. From these data it is possible to calculate the moneys available from revenues for capital improvements during each of the years covered by the program. These moneys may, of course, be supplemented by borrowings or special assessments. Borrowings often constitute a major means of financing city improvements. An attempt should be made, however, to hold down to a minimum the issuance of bonds for city plan improvements, so that the tax burden on future years will not be unduly increased. In some states special assessments may be used quite extensively for local improvements. Whenever permissible, such assessments should be equitably spread over the areas deemed to be benefited and these areas should not overlap in such way as to place excessive or burdensome charges on some property owners.

The industrial and economic conditions and trends of the city should be carefully studied in relation to the future financing program. City building permits may be taken as one indication of increasing property valuations for purposes of taxation. Manufacturing statistics, bank clearings, employment figures, and business indicators may also be used to throw light on the city's expansion and probable trend of expenditures. The institutional programs of private organizations, especially in the fields of health, welfare, and recreation, are closely related to those of the city. These are merely some of the more important things that ought to be considered in connection with the long-term financial program.

It is usually assumed that the current or some other tax rate which will not be burdensome on the property owners of the city will be established by the financial program. Of course this rate may be varied within certain limits to fit the demands of the program, depending upon the urgency of the projected improvements. When the amount of money available during a given year cannot be increased, it is then necessary to shift the less urgent projects to some other year so that the cost will not exceed the means of financing. Thus, the balancing is done not only for the entire period, but also for each year included in the program.

When the long-term financial program has been completed, it should be considered, revised if necessary, and formally adopted through a resolution or otherwise by the city council. Of course such program cannot be made binding in all its details; it must be flexible, subject to review and adjustment when each annual budget is adopted. But if the program is carefully prepared, it will not need to be greatly modified except when extraordinary conditions arise. At each annual budgeting, the program should be extended one year so as to keep it five or ten years ahead of the present. The part of the program falling within the budgetary period should of course be incorporated in the annual budget each time it is prepared. By definitely fitting the program into the budget, we have some measure of assurance that it will be carried out year after year and not be forgotten or discarded.

By way of conclusion, perhaps we should cite an example of long-term planning of public improvements. A striking one is the Cincinnati scheme which is now in its fourth year. It is the joint product of the city, county, and school authorities, assisted by the local research agency, and incorporates the major projects scheduled for a five-year period by the city plan, as formulated and officially approved in 1925. It provides for the coördination of the improvement projects of the city, county, and school district, and the integration of current and capital financing. It is based upon a five-year forecast which is revised and extended annually through the aid of a financial analysis.

The Cincinnati Bureau of Governmental Research developed the annual financial analysis in connection with this capital plan-

ning. The purpose of the analysis is to predict the normal and necessary expenditures of the three overlapping governmental units—city, county, and school district—for a period of five years. In this way the additional expenditures to be allowed for improvements or special expansion of activities can be intelligently determined. The analysis follows these general lines: (1) the trend of real and personal property valuation is estimated; (2) the normal operating expenditures for the city, school district, and county are predicted and translated into a total tax rate for this purpose; (3) the annual charges for interest and principal on existing debt are computed and the tax rate determined; (4) the tax rates as computed in (2) and (3) are added together to obtain the probable total rate if no more bonds were to be issued and no special expansion of activities undertaken; (5) a reasonable maximum tax rate is tentatively assumed; and (6) the difference between (5) and (4) is obtained which, when multiplied by the estimated assessed valuations, represents the amount available for debt service on new bonds or for special expansion of activities.

In its financial analysis issued during August, 1930, the Bureau calls attention to several factors which may change or modify the financial picture of the immediate future. One is the 1931 revaluation of property, which will undoubtedly affect the 1932 and subsequent tax duplicates and consequently the corresponding tax rates. Another factor is the probability of new state tax laws. The Ohio Legislature of 1931 is empowered by constitutional amendment to rewrite the tax laws. A third factor is the special levies for roads or schools which may materially affect the local situation in the near future. After estimating as carefully as possible the probable effects of these factors on future finances, the Bureau indicates that the three governmental units might issue annually a total of \$6,000,000 in bonds without exceeding the assumed maximum tax rate of \$21.50 during the period from 1931 to 1935 inclusive. But it suggests that a similar figure should not be regarded as being possible during subsequent years.

STATE-WIDE PLANNING TO SAVE THE BEACHES

By TAM DEERING

Executive Secretary, State-County Parks and Beaches Association
San Diego, Calif.

ONE of the purposes of state and national planning should be the preservation of the entire ocean frontage of our country as park land, except such portions as are required for commerce or have already been privately developed beyond recovery. European cities have preserved their waterfronts for the use of the people and have made them a central attraction in their civic life. Some of our American cities are now doing the same.

Chicago, after letting her waterfront become an eyesore, cluttered with a network of railroads and other undesirable developments, is now creating a beautiful shore line of parks and playgrounds. There are miles and miles of winding lagoons, yacht basins with flotillas of gleaming white sailboats, numerous bathing beaches used each summer by more than 2,000,000 people, the matchless Buckingham Fountain, Field Museum, Soldiers Field, and other civic features. Because Chicago permitted this waterfront to be monopolized in the beginning, she has had to spend \$60,000,000 to regain it, and the superintendent of the South Parks system declared last October that still another \$40,000,000 must be voted. They plan ultimately to regain and beautify the state's entire shore line on Lake Michigan.

Milwaukee is following the example of Chicago. Minneapolis has twenty-two miles of beautiful waterfront with park-like treatment of beaches and playgrounds. New Orleans is spending \$15,000,000 on the development of Lake Pontchartrain, and when this development is completed the city will have a shore line of parks and boulevards five miles long, with eleven bathing beaches and every facility for yachting, boating, fishing, and other sports in a landscape of rare beauty.

Those of us who have lived in Boston know that among the chief delights of that city are the Charlesbank, the Back Bay Fens, Nantasket and Revere Beaches, the Strandway, Castle Island,



Photograph by Lee Passmore

A PRIVATELY OWNED BEACH

Bird Rock, a well known feature of the Southern California coast, is an example of failure to act in time to preserve the beaches for the people

Governor's Island, Wood Island, Columbus Park, Marine Park, North End Beach, Tenean Beach, and the miles and miles of park waterfront on river, lake, and ocean. Yet in spite of the generous provision made in Boston for waterfront sports the Boston Park Commission in 1925 stated that in the summer the throngs of pleasure seekers at the beaches increase more rapidly than accommodations can be provided; with Boston's climate and with its population of enthusiastic bathers, the hot-weather crowds overtax all the public beaches and trespass upon the private beaches from Plymouth to Portland, Maine.

CALIFORNIA'S PLIGHT

And what have we done in California? Cities in Southern California will have to spend millions to purchase "peep holes" through which the people may look out on the unfamiliar ocean surf. The waterfront is easy to exploit and quick to disappear. All along the Southern California coast, people are held back from their natural heritage by signs put up by the private owners of the beach frontage: "Picnicking on Beach, Fifty Cents."

What has already happened in certain sections of Southern California will happen the length of the state and throughout the nation unless we make comprehensive plans and take vigorous action to preserve the waterfront. We must either do it now while it can be done at comparatively small cost, or we shall do it later "through the nose."

Compare the California situation with that of Vancouver, British Columbia, or Seattle, Washington. With a short summer season and water twelve to fourteen degrees colder than the waters of Southern California, Vancouver has four great bathing beaches with excellent facilities, adjoining beautiful marine parks, and more than twenty-five miles of waterfront parks. Seattle has twelve public beaches with bathing facilities, and scores of miles of beautiful lake and oceanfront parks.

Of interest to all city and regional planners is the action taken by San Diego city and county in adopting a "Save the Beaches" ordinance requiring all new subdivisions on the waterfront to dedi-



A PUBLIC BEACH AT SAN DIEGO

This beach was acquired for public use under the operation of the "Save the Beaches" ordinance

cate a roadway paralleling the waterfront and to set aside the land between this roadway and the ocean as a public park. More than one hundred local organizations were mobilized behind this measure, and it was unanimously adopted by the County Board of Supervisors.

BUSINESS, NOT SENTIMENT

The adoption of such an ordinance or any steps to keep the waterfront for the use of all the people is good economics for any city or county possessing an ocean, lake, or riverfront. Looking at it from a cold-blooded business standpoint we know that the waterfront, if preserved, will perpetually enrich all property values throughout the county and even the state. One prominent realtor testified at one of the hearings in San Diego County: "The first question Eastern people who come into my office ask is, 'Can we get down to the ocean in this country? We left our homes and came to California because we wanted to enjoy the ocean beaches, and now we find that we must pay just to go and sit on the sand and look at the water.'"

The experience of Newport, R. I., has shown that public reservation of the waterfront does not injure even the most exclusive private homes. There millionaires have their private residences along the famous Cliff Walk, and the people have access to the ocean through a provision in the original colonial grant applying to the entire state.

It has been proved in San Diego County that the owner who sets aside an oceanfront roadway profits most of all, for instead of being restricted to selling only the first line of lots as waterfront property, every lot throughout his subdivision, no matter how far back, is a waterfront lot.

A bill was introduced in the California Legislature in 1927 to apply a "Save the Beaches" ordinance to the entire state. The bill passed the Assembly by vote of 53 to 21 but failed in the Senate by a single vote. It was opposed by a powerful lobby representing a few owners who hold hundreds of miles of the California oceanfront.

Every city, county, and state in America possessing a waterfront should adopt such an ordinance. The people in interior counties have fully as great an interest as those directly on the waterfront. Increasing leisure, good roads, automobiles, and airplanes are rapidly making the oceanfront the playground of the people in every part of the state and nation. The time will come when the men and women who tend the crops and carry on the necessary business in the hot arid regions of the interior of southwestern United States will escape the intense heat of the summer season by taking an airplane to the coast for an afternoon dip in the ocean.

Let us therefore, in California and in every section where there is a waterfront, do these five things:

1. Require a roadway along the waterfront in all new subdivisions.
2. Secure as a public park the land between the roadway and the ocean.
3. Acquire by gift or purchase all frontage not likely to be subdivided, in order that it may be used for a parkway.
4. Zone both sides of this parkway to prevent "hot dog" stands, billboards, and other objectionable developments.
5. Apply this treatment to rivers, lakes, and bays as well as the ocean shore.
6. Acquire great state, county, and city marine parks on rivers, lakes, and ocean providing abundant room for every water sport, for camping facilities, and for landscape development.

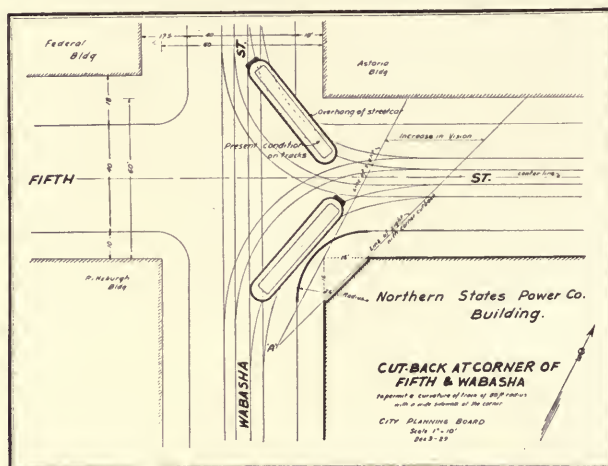
The waterfront on ocean, lake, and river does not belong merely to those who live beside it. It belongs as much to the people far removed. It is our country's greatest playground. The people who live beside waterfronts have a responsibility to preserve this gift of nature for all those to whom it rightfully belongs: the people of to-day, and the generations yet to come.

CURRENT PROGRESS

Conducted by JOHN NOLEN and HOWARD K. MENHINICK
 LAWRENCE VEILLER HAROLD S. BUTTENHEIM
 ARTHUR A. SHURCLIFF CHARLES W. ELIOT 2nd
 GORDON J. CULHAM

CORNER BUILDING CUT-BACK IN SAINT PAUL

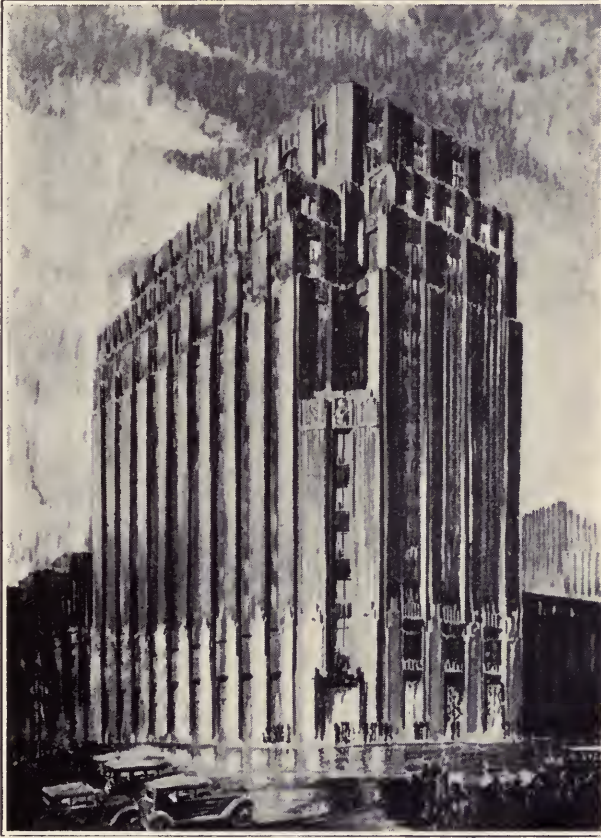
When the Northern States Power Company proposed to erect a new office building in the city of St. Paul at the intersection of two sixty-foot streets, a committee from the St. Paul City Planning Board called upon the officials of the company and requested that the corner of the proposed building be cut back in order to improve visibility, give greater sidewalk space at the corner, enable the street railway company to increase the radius of curvature of their track from forty feet to fifty feet, and in other ways improve the traffic situation at that particular crossing.



Cut loaned by Bulletin of the Minnesota Federation of Architectural and Engineering Societies

The St. Paul City Planning Board pointed out that the intersection must carry the traffic of both streets and that the enlargement of the intersection immediately increases its capacity by facilitating steady and continuous movements of vehicles from one street to the other; that since it takes the brain about one second to react to a given condition, the increased visibility may mean the difference between safety and an accident; that the possible increased radius of curvature of the street car tracks permits street cars to turn the corner with greater speed and less noise; that pedestrians from the two streets meet and mingle at the corners of the intersection and that the wider walk

at the corner gives desirable consideration to the pedestrian. From the owners' standpoint, the building has three exposures on the street instead of two. Window-display capacity is increased. The corner cut-back adds to the attractiveness of the building and gives it an advertising value that a square-cornered building does not possess.



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Northern States Power Company Office Building

The suggestion was favorably received and, after some discussion with the architects, adopted. This is an example of what can be accomplished through coöperation between building owners and a planning board. It is also an example of a public utility company interesting itself in the civic requirements of the city in which it is located.

GEORGE H. HERROLD,
Managing Director and Engineer, St. Paul City Planning Board.

CITY PLANNING IN PHILADELPHIA

In the summer of 1929, Mayor Mackey, pursuant to ordinance of City Council, appointed a City Planning Commission consisting of fifteen members with Mr. Joseph E. Widener, of the Fairmount Park Commission, as Chairman, and Colonel Samuel P. Wetherill, Jr., President of the Regional Planning Federation, as Vice Chairman. Prominent professional and business men of Philadelphia, as well as representatives of the City Council and organizations such as the Fairmount Park Commission, are included in the membership. The members were appointed for periods varying from one to six years in length. In addition to this Commission, the Mayor has appointed 300 prominent citizens to serve as an Advisory Board to the Commission, and to act as a clearing house for suggestions for community development.

At the same time the City Plan Commission was appointed, a Zoning Commission of twenty-two members was also appointed under authority obtained by legislative act in 1929.

Last January the Commission, through its chairman, Mr. Widener, enlisted the aid of Mr. Jacques Gréber of Paris as its architectural consultant. Mr. Gréber is well known abroad and here as a city planner and landscape architect and, more particularly, for his work in Philadelphia in connection with the design for the Fairmount Parkway between the City Hall and the Art Museum.

Mr. Gréber has made three or four trips to this country since February, spending many weeks in Philadelphia, as well as abroad, on the plans that are now being developed. One of his first acts was to make himself familiar with the work of the Regional Planning Federation of the Philadelphia Tri-State District, and to secure from them copies of the preliminary comprehensive plans and aerial maps for the region surrounding Philadelphia.

The work of the City Planning Commission in drafting its plans for Philadelphia, as well as the work of Mr. Gréber, has been expedited by the appointment of a Technical Committee of five members within the Commission, having as its chairman Mr. Walter H. Thomas, Director of the Department of City Architecture and formerly President of the Philadelphia section of the American Institute of Architects. Inasmuch as the Commission has been working with no direct appropriation, this set-up has made it possible for the Commission, through Mr. Thomas, to call upon various city departments for information and assistance.

An interesting phase of Mr. Gréber's work has been the utilization of an enlarged aerial mosaic map of the city for the picturing of the skeleton plan. The aim of the Commission and of Mr. Gréber is to have the plans as finally submitted combine the elements of vision and design with those of feasibility and expediency. A policy of coördinating the Commission's ideas and efforts with those of other authorities vitally concerned in recommendations of the

Commission has been adopted, resulting in many conferences with such bodies as the Delaware River Bridge Joint Commission, the Pennsylvania Railroad, the Baltimore and Ohio Railroad, Fairmount Park Commission, Regional Planning Federation, and various trade bodies.

While the activities have been essentially directed toward the completion of a skeleton city plan, special attention is being given at this time to specific problems of very vital and immediate importance. These comprise such studies as the approach to the Delaware River Bridge; parkway, boulevard, and bridge improvements necessary to coördinate them with the Pennsylvania Railroad improvements along the Schuylkill River; and means for relief of traffic congestion.

The Commission and Mr. Gréber submitted to Mayor Mackey their first preliminary plans on November 12.

JOHN NOLEN, JR.,
*Assistant Engineer, Regional Planning Federation
of the Philadelphia Tri-State District.*

LARGE PARK APPROPRIATION FOR NEW YORK CITY

The Board of Estimate and Apportionment of New York City recently made available for the purchase of park and playground sites \$28,072,954,—a sum nearly equal to the total expenditures for public recreation in the United States in 1929, estimated at \$33,539,805. Twenty-five million dollars of the appropriation will be obtained by issuing corporate stock. The balance comes from the real estate fund, consisting of proceeds from the sale from time to time of parcels of property no longer required by the city. It is the present policy of the Board of Estimate and Apportionment to use whatever money accumulates in the real estate fund for the acquisition of parks and playgrounds.

The action of the Board in making this large appropriation followed the unanimous recommendation of a special committee named last spring by the Mayor to make a study of park needs. Included in the committee were the Comptroller and the Park Commissioners and Presidents of the five boroughs.

Manhattan will receive 32 per cent of the appropriation, Brooklyn, 24 per cent, Queens and Bronx, each 16 per cent, and Richmond, 12 per cent. The complete program calls for the purchase of about 3550 acres of park land and about one hundred playgrounds. This will bring the city's recreational area up to approximately 16,000 acres. At present, New York has one acre of park land for each 498 persons. When the program has been carried out there will be one acre for each 389 persons. The proportion of the total city area devoted to park purposes will be increased from 7.08 per cent to 9.04 per cent.

J. N.

A CITY PLANNING COMMISSIONER FOR THE CITY OF NEW YORK

A brief account by Mr. Edward M. Bassett of the appointment of a City Planning Commissioner for the City of New York will be found on page 50.

SUBURBAN SHOPPING CENTER AT DALLAS

Highland Park Shopping Village, a modern suburban shopping center in picturesque architecture, is being built at Dallas, Texas, by a firm of realtors as part of an extensive high-class residential development. The buildings will not be sold but will be leased on a long-term basis at a rental which includes a maintenance charge in order to insure that the property will be adequately cared for throughout the term of the lease.

Planned in seven units about a plaza, the group, when completed, will occupy ten acres of land and will contain approximately 180,000 square feet of rentable floor area. Facilities are being provided for department, drug, and food stores, banks, a theater seating 1500 persons, a branch of the Highland Park police and fire departments, barber and beauty shops, offices, studios, etc.

Incorporating the best features of well planned shopping centers, this development will contain parking space for 700 automobiles, and loading zones at the rear of the food stores and merchandise shops. The buildings are being constructed of light stucco over reinforced concrete and tile, with red tile roofs and black iron grille work. Because Texas is imbued with a Spanish background and abounds with traditions of the Conquistadores, the Spanish type of architecture selected seems particularly appropriate.

E. A. Wood,
City Planning Engineer, Dallas.

A LONG-TERM FINANCIAL PROGRAM FOR ROANOKE

Roanoke, Virginia, is preparing a ten-year financial program which it hopes to inaugurate early in 1931. The program will include a schedule of all capital improvements, an estimate of the annual expenditures that will be necessary to carry out this schedule, a suggested method of financing, and an operating budget.

The preparation of the program has been undertaken by a Citizens' Advisory Committee of leading representative citizens of the community, appointed by the mayor and advised by Mr. John Nolen. It is working in close cooperation with the city manager, the city departments, and the City Planning Commission.

H. K. M.

BILLBOARDS IN MASSACHUSETTS

The right to control outdoor advertising *on private land* is being tested in the case of the General Outdoor Advertising Company and others against the Massachusetts Board of Public Works and the Selectmen of Concord. Massachusetts, due largely to the untiring efforts of the Massachusetts Federation of Planning Boards, is the first state in the Union to enact a law for that specific purpose.

Hamstrung as it now is in enforcement by a court injunction temporarily protecting from molestation all the existing billboards of the big advertising companies who are party to the suit, this law has already been worth millions of dollars to Massachusetts in protecting the roadsides from further desecration. Since 1925, new billboards have been erected only in accordance with the state rules. Not only has the law prevented much disfigurement of the Massachusetts landscape but it has also caused the removal of a mass of objectionable material that was already in place. In the period since the law went into effect the engineers of the Department of Public Works have taken down some half million outlaw signs.

Since April, a new patrol has been maintained over the thousands of miles of highways in Massachusetts,—a patrol said to be the first of its kind in the United States. This is the Sign Patrol, mobilized under the state law by the Department of Public Works and placed in charge of the Supervisor of Outdoor Advertising. Working usually with a force of three men, in the few months this patrol has been in service it has removed, painted out, scraped off, and torn down some 25,000 unlawful signs, including metal signs, political advertisements, theatrical posters, and billboards up to fifty feet in length,—and removed them not only from the highways but from adjoining private land as well.

The only signs exempt from the action of the law are those advertising goods manufactured on the premises where the signs stand, and those belonging to the big companies who are party to the suit and whose signs are therefore protected by temporary court injunction.

A certain maker of brushes began to erect on Massachusetts farms signs advertising his business. When ordered to remove them he protested that every one of those farms raised pigs. He said, "Every pig is manufacturing bristles for my brushes and they are doing it on the premises where the signs are located, so I have a perfect right to put the signs up." But the Attorney-General ruled that "pigs is pigs" and not brush manufacturing plants, and the signs came down.

—*Summarized from the Report of the Billboard Law Defense Committee (HORACE B. GALE, Chairman) to the Conference of the Massachusetts Federation of Planning Boards.*

BERLIN CONGRESS OF INTERNATIONAL FEDERATION FOR HOUSING AND TOWN PLANNING

The Congress of the International Federation for Housing and Town Planning will be held in Berlin, Germany, from June 1 to 5, 1931. Abolition of slums and the traffic problem in relation to town and regional planning are the principal subjects for discussion.

The Congress of the International Housing Association will be held in Berlin during a part of the same week.

At the same time, a great German Building Exhibition will be held in the Berlin Exhibition Grounds. Here will be shown progress from 1900 to 1930, as it is during these last three decades that there has been such a revolution in housing and town planning. It is proposed to regard 1900 as "Yesterday," belonging to history, and 1930 as "To-day." By contrasting "Yesterday" with "To-day" it is hoped to evoke a vision of "To-morrow."

J. N.

LOS ANGELES COUNTY REGIONAL PLANNING, 1923-1930

The following is a summary of the activities of the staff of the Regional Planning Commission of Los Angeles County, Calif., from 1923 to 1930.

THE DIRECTOR (member, American City Planning Institute and American Society of Landscape Architects) has:

1. Attended 225 regular biweekly meetings of the Regional Planning Commission, and effectively carried out the policies of the Regional Planning Commission as there determined.
2. Represented the Commission before the Board of Supervisors of Los Angeles County whenever any matter involving the Regional Plan has been under consideration.
3. Attended as a representative of the Commission over 700 important conferences where the general principles of regional planning were involved.
4. Obtained, annually, a budget for the purpose of continuing the special and technical work involved in the completion of the regional plan, and its administration.
5. Assembled a technical staff of 24 persons, trained in the various types of work required in a well balanced planning office.
6. Organized the office to correspond with the natural divisions of the work of planning: namely,

(a) Administrative and Executive	(e) Zoning
(b) Research and Statistics	(f) Landscape Design
(c) Highways	(g) Visual Presentation
(d) Subdivisions	(h) Office Routine
7. Coördinated all phases of planning, so that the work done in each section is properly related to, and in harmony with, the work in every other. (Shifting of staff members between the various sections has been adopted as a means of securing increased understanding, initiative, and efficiency.)

8. Supervised general organization and methods of procedure, so as to produce a minimum loss of time in the preparation of plans in the drafting room and in the general secretarial work of the outer office, and maintained a system of daily and monthly reports in furtherance thereof.

9. Developed the policy of the "open door" both to staff members and to the general public, holding himself constantly available for free discussion of every detail of planning policy.

10. In general, and with reference to a variety of matters which do not readily lend themselves to detailed tabulation, guided the staff and "planned the work of planning."

THE CHIEF ENGINEER (member, American Society of Civil Engineers) has:

1. Taken direct responsible charge of the actual working out of the Regional Plan, conferring frequently with county and local officials, property owners, and engineers, and securing their support and coöperation.

2. Secured the organization of the interdepartmental committee (Deputy County Surveyor, Assistant Road Commissioner, and himself) which meets weekly for the joint study of highway and intersection problems, and for the consideration of petitions for opening, widening, and improving highways with reference to the Plan.

3. Assisted in establishing the practice of requiring full information as to probable costs, prior assessments, property valuations, and a certificate of approval by the committee just mentioned on the face of all such petitions.

4. Spent two days of each week on field trips, surveys, and investigations in connection with these matters.

5. Prepared special reports of importance on:

- (a) The Regional Plan of Airports
- (b) The Industrial Trackage Situation
- (c) Program of Grade Crossing Elimination
- (d) Major Airports for the San Gabriel Valley
- (e) Existing Airports and Landing Fields

6. Secured official approval of the San Gabriel Valley Highway Plan (Section 2-E) by each of the 17 incorporated cities involved, and by the County, and submitted to the Commission a 138-page report, printed, and illustrated, with maps, as a permanent record and a basis for budgeting public improvements.

7. Secured the approval of the cities in the Long Beach-Redondo area for the Highway Plan of Section 4, a record report for which (the second of a series) will soon be completed.

8. Supervised, as to engineering detail, all drawings and studies made in the office, and directed the working out of problems involving special difficulties.

9. Maintained contact with local improvement associations and property owners, and adjusted conflicting interests in many important matters affecting the future development of the County.

10. Organized the City and County Engineers Association, which meets monthly for the interchange of ideas, and the advancement of coöperative effort in community engineering.

THE RESEARCH ENGINEER and his assistants have:

1. Built up a reference library of 80 volumes on city and regional planning theory and practice, for the use of the staff.

2. Established a complete subject file of information touching all phases of planning.

3. Kept files of 28 magazines, 16 bulletins, and clippings from 10 newspapers.

4. Secured hundreds of pamphlets on related subjects, and 72 official Plan Reports.
5. Issued a biweekly bulletin, now in its third year, which goes to 400 selected officials and citizens. Over 900 specific items of special interest have appeared in this index form, 50 per cent of which have been reprinted in local papers or in periodicals of wide circulation.
6. Made the following Special Surveys:
 - (a) Existing Airports in Los Angeles County
 - (b) Existing Industry in Unincorporated Territory
 - (c) Population—San Gabriel Valley, Long Beach-Redondo Area
 - (d) Status of City Planning and Zoning in California
 - (e) Building Heights in Business Centers—United States and Europe
 - (f) Parks in Small Cities—Los Angeles County
 - (g) Area of Incorporated Cities in Los Angeles County
7. Prepared Research Reports as follows:
 - (a) History of Planning in California
 - (b) Regional Planning in England and France
 - (c) How the Landscape Architect Fits In
 - (d) Zoning—And How
 - (e) Outline, Regional Planning Commission (32 pages printed)
 - (f) Regional Planning of Airports
 - (g) History of the Los Angeles Administrative Center
 - (h) Minutes of all meetings of the Regional Planning Commission
8. Supervised the textual content and style of the San Gabriel Valley Highway Report and all other reports issued by the office.
9. Kept the office in contact with other planning commissions, especially those doing regional work, by correspondence and the exchange of bulletins and reports.
10. Made 400 photographic studies of planning interest for exhibition and educational work and for historical purposes.
11. Coöperated with the Research Committee of the Los Angeles Chamber of Commerce.
12. Assisted the State-wide Committee on Planning Education in the collection of material for a "Manual of Planning" now being prepared for use in the public schools.

THE HIGHWAY ENGINEER (member, American City Planning Institute) and his assistants have:

1. Secured the passage of a resolution by the County government establishing 100 feet and 80 feet as the standard widths for major and secondary highways, respectively.
2. Made hundreds of field studies to determine proper highway alignments and widths, in particular localities.
3. Completed new base maps (scale 1 inch to 1000 feet) for study and presentation of the plan for the developed portions of the County.
4. Established a tentative highway plan for the entire 4115 square miles of the County's area.
5. Carried out an educational program which has made the Plan an accepted reality in the public mind.
6. Precised and completed the highway plan of the San Gabriel Valley for official adoption by 17 cities and by the County.
7. Maintained a complete set of County Surveyor's maps (scale 1 inch to 600 feet, and 1 inch to 400 feet) with the highway plan superimposed, for use in regulating new subdivisions, and in studying proposed openings and widenings.
8. Secured the enactment of 66 building-line ordinances protecting 200 miles of proposed new highways against encroachments costly to remove.

9. Made scores of detailed large-scale studies of individual highway problems, incidental to the precisizing of the plan. (Intersections, grade separations, river crossings, alignment corrections, traffic betterment.)

10. Coöperated with the Road, Bridge and Surveyor's departments and with the Engineers of the 44 incorporated cities of the County for the purpose of having all construction work conform to the regional plan.

11. Brought about, through conference with property owners, voluntary agreements to protect right of ways, and the actual dedication of many parcels of land which would have been expensive to acquire through condemnation. Examples of great savings through this method are found in recently completed highways, such as Arrow, Sepulveda, Broadway, Ninth-Mines, Beverly (east), Atlantic, and others.

12. Precised the highway plan for the Long Beach-Redondo area involving 9 cities around the Los Angeles-Long Beach Harbor and the southwest coastal district.

THE SUBDIVISION ENGINEER and his assistants have:

1. Established a subdivision committee, with the Subdivision Engineer as chairman, representing 7 County departments, with 3 others and 44 incorporated cities coöperating.

2. Developed rules for the regulation of these subdivisions, with standards as high as any in the country.

3. Approved 1977 proposed subdivisions, with a combined area of 131 square miles, all in *unincorporated* territory, thereby

(a) Securing the elimination of jogs, dead-end streets, and dangerous grades and curves throughout all these tracts.

(b) Saving several hundred thousands of dollars to the County, by securing dedication of 100 miles of major and secondary highways.

(c) Safeguarding unsubdivided property against uncorrelated or uneconomic developments.

(d) Protecting drainage, sanitary, and other public utility lines against costly mistakes.

4. Assisted scores of subdividers in planning outstandingly good designs for new subdivisions and community development plans.

5. Prepared special reports, among others the following:

(a) Lot Sizes

(b) Intersection Treatment

(c) Park Areas in County Lands

(d) Beach Development

(e) Economic Phases of Land Subdivision

6. Kept in close touch with important legislation affecting land subdivision and made detailed studies of proposed new laws.

7. Made two field trips each week for the purpose of examining the sites of proposed new subdivisions, many of them at distances of from 15 to 30 miles from the office.

8. Prepared a perspective map showing all the subdivided portions of the County, a chart showing all the steps involved in land subdivision, and other drawings exemplifying this work.

9. Made a truck traffic survey of the Los Angeles-Long Beach Harbor District.

THE ZONING ENGINEER and his assistants have:

1. Made regional studies with final maps showing

(a) Distribution of population

(b) Tree crops, oil fields, dairies

(c) Rapid transit facilities

(d) Time and fare zones (P. E. Rwy.)

(e) Industrial areas

(f) And many others

2. Completed Use of Property Surveys in 117 square miles of unincorporated territory.
3. Held 52 public hearings, addressed 91 meetings of organized groups, and made 20 large drawings to illustrate and clarify zoning principles and procedure.
4. Prepared and secured the adoption of the first county-wide zoning ordinance in the United States (effective 9-12-27).
5. Conducted a series of hearings bearing on the problem of building height regulations (report now being prepared).
6. Issued four annual reports, a 28-page printed "Guide to the Zoning Ordinance," and a pamphlet on the Standardization of Zoning Symbols.
7. Organized a Permit Bureau under the zoning ordinance, controlling, in coöperation with the County Fire Warden, all building in unincorporated areas.
8. Protected the homes in all purely residential districts outside of city limits, against junk yards, animal hospitals, and like invasions.
9. Developed standard zoning symbols, since adopted by the County, the City of Los Angeles, and 17 other cities.
10. Assisted in the enforcement of setback ordinances and of eight other general laws and ordinances affecting construction.
11. Organized the Zoning Study Group and the Zoning Advisory Committee of Southern California.
12. Completed the detailing of zones under the County ordinance in seven widely different communities, with four more under way; providing for a total of 38 square miles and a population of 150,000 people living outside the limits of any incorporated city, all the safeguards usually found only in municipalities.

THE LANDSCAPE ARCHITECT and his assistants have:

1. Prepared preliminary studies for a system of parkways and the location of major recreational areas for Los Angeles County.
2. Coöperated with the County Architect and the Superintendent of Recreation in the working out of design and planting plans and building locations on County-owned land.
3. Prepared complete design and planting plans for local parks, playgrounds, and recreational areas at Baldwin Park, Lancaster, Santa Monica Beach, and others.
4. Examined all parts of the highway plan, checking them from the standpoint of design, and suggesting such changes as engineering and economic features justified.
5. Given special attention to the problems of highway cross-sections and intersections, grade separations or river crossings, local business centers, and other matters involving opportunities for creative design.
6. Developed the study of "Zoning by Design" through a series of plates showing possibilities in a 160-acre tract.
7. Studied site planning with reference to public buildings, especially in two important cases.
 - (a) Los Angeles City and County Administrative Center (design officially adopted December 5, 1927)
 - (b) County Fair Grounds at Pomona (design officially adopted and first permanent building, walks, and traffic ways placed in accordance therewith)
8. Made special studies of large holdings for subdivision from the standpoint of community design, notably a 1000-acre tract north of Long Beach, the Montana Ranch, Montebello, La Crescenta area, and complete designs and drawings of the Ford Avenue Parkway, Cahuenga Pass Road, Approaches to Hollywood Bowl, Devil's Gate Dam, and others.
9. Designed in detail two proposed major air terminals, and several smaller airports.

10. Supervised all drawings produced in the office from the standpoint of design.
11. Emphasized in all the work economic factors and sound engineering principles as of equal importance with balance and beauty of design.

THE STAFF ARTIST has:

1. Designed and prepared illustrative material for use in connection with the educational program of the Commission.

2. Prepared special pen-and-ink perspective drawings as follows:

- | | |
|-------------------------------|-------------------------------------|
| (a) County Base Map | (e) Whitnall Highway Extension |
| (b) Arrow Highway | (f) Mulholland Bridge-Cahuenga Pass |
| (c) Big Pines Recreation Camp | (g) Building Height Regulations |
| (d) Van Nuys Boulevard | (h) East San Gabriel Valley Map |

and others.

3. Made diagrammatic sketches and drawings as follows:

- (a) Treatment of Hillside Parkways
- (b) Staff Organization Chart
- (c) Steps Toward the Master Plan
- (d) Excess Business Property
- (e) When It Strikes Home
- (f) Waste in City Building
- (g) Plan or Patch Work, Which?—and others.

4. Prepared special exhibits for

- (a) 15 Fairs—Alhambra, Pomona (5 years), Compton (4 years), Baldwin Park (3 years), Anaheim, Long Beach (3 years).
- (b) 8 Planning Conferences—London, England; Buffalo, N. Y.; Sacramento, Calif.; Oakland, Calif.; Santa Barbara, Calif.; Long Beach, Calif.
- (c) 18 County Planning Association meetings
- (d) 12 Club meetings
- (e) 6 Chambers of Commerce meetings

Note: For each of these, new photographic, photostatic, and original material was prepared. Well lighted and well decorated booths were designed and attended constantly by the Staff Artist, who answered questions and explained the work. Average size of exhibit—30 to 40 items.

5. Arranged 18 photographic layouts for office use, and prepared 200 special illustrations in connection with newspaper and magazine publicity.

6. Checked all drawings made in the office to insure their suitability for reduction and the making of line cuts for printing.

7. Supervised art work, typography, and illustrative material in the San Gabriel Valley Highway Report and other printed reports.

8. Coöperated with the Committee in charge of the Olympic Games in the preparation of illustrative material.

THE SECRETARY and her assistants have:

1. Organized and maintained the general correspondence files of the office, as well as clipping books, requisitions, civil service records, minutes of committee meetings, reports, and work orders.

2. Kept office expenditures within the annual budget by means of careful records and the exercise of care in purchasing.

3. Coöperated with the Purchasing Department in making arrangements for all needed office and drafting supplies and equipment.

4. Checked and approved all County Auditor's forms, payrolls, vouchers, mileage reports, and the like.
5. Maintained close contact with the Civil Service Commission in connection with necessary examinations and salary adjustments incident to the employment of the technical staff.
6. Relieved the section heads, as well as the Director and the Chief Engineer, of the burden of routine details, such as appointment records, daily calendar, programs, vacation schedules, address lists, and the like.
7. Handled over 1000 telephone calls and made initial contact in the outer office with about 500 callers per month, directing each to the attention of the proper member of the staff.
8. Organized the stenographic work of the office by assigning each stenographer to certain section heads, and dividing the routine duties, filing, and general typing in an equitable manner.
9. Transcribed and mailed monthly over 400 personal letters (in addition to special mailings in quantity), and typed reports, special articles, memoranda, agenda, minutes, and other material.
10. Attended numerous public meetings and conferences, taking stenographic records of speeches for distribution and permanent record.

HOW TO SECURE NEWSPAPER SUPPORT

Newspaper support is necessary to a planning program. What can be done about these editorial ideas? How can they be met? Here are some suggestions from editorial sources:

1. Get good news and publicity advice.
2. Ask newspaper editors to sit in with you on your projects.
3. Visit newspaper offices and have the editors show you through the plant from the reporters' desks and the Art Department to the presses in the basement.
4. Give the newspapers black and white maps, "contrasty" photographs, and clear-cut drawings.
5. Newspapers have their own hobbies. One may be interested in street improvement, another in zoning, another in parks. Give each newspaper the kind of news it is especially interested in.
6. When you find an editor or a staff reporter who is genuinely interested in planning, cultivate him, educate him, and listen to him.
7. If you prepare your own newspaper releases, keep them as brief as possible with all your facts in the first paragraph. A good short item on planning that covers the ground will get preference over a long one. A visit to the newspaper office will show you why.

—From bulletin of Oct. 1, 1930, of the Planning Foundation of America, *Is City Planning News? If Not, Why Not?*

ZONING ROUNDTABLE

Conducted by EDWARD M. BASSETT

MINIATURE GOLF COURSES

At the National Conference on City Planning held at Denver this summer the Zoning Roundtable was the center of debate on miniature golf courses. The leader would now and then break away from this subject to discuss some other zoning question, but he was soon brought back to a further development of the law of miniature golf courses. In the early days of zoning we said that no human prescience could foretell what problems would arise in the intimate regulations of land, buildings, and their uses. This new game so suddenly appearing multitudinously in American cities has proved that we were right. Many cities, however, were taken by surprise and either did not know how to enforce their zoning ordinances or else their zoning ordinances were not prepared for this newcomer. In the discussions at Denver it appeared that some cities allowed the game in residential districts and liked it fairly well. Others tried to prohibit it in residence districts because of noise and especially because of bright lights in the night. The leader took the ground that it is a business, that permits for the buildings of the ticket taker, rest rooms, etc., should not be issued as a matter of right in a residence district, and that if the game came into a residence district not asking for any building permit it should be ousted as an unlawful use.

Just before the Conference one court had held that miniature golf was not golf and was not a club but was a business. If this decision was right, and we think it was, it follows that a miniature golf course with its necessary buildings can be placed as a matter of right in a business district but not in a properly defined residence district. A case came up in Greater New York where the lawyer for the operator argued before the committing magistrate, before whom his client had been summoned on a criminal charge, that the golf course was no more a violation than was a tennis court in a residence district. The answer is that a tennis court operated as a business is not allowable in a residence district. The reason the tennis court has not made a furor is because admission is not usually charged, or if it is there are only a few players at one time. Strictly speaking, however, tennis courts in a residential district operated for pay constitute business and can be ousted.

But what shall we say of a miniature golf course properly existing in a business district which later is changed to a residence district? Is the game such a business use as will stamp the land with the character of nonconforming business? If so, the owner may claim the right to follow it up with a

restaurant and later with a store building. It is worth while considering whether a modern zoning ordinance might not well contain the following provision:

The use of land for games shall not be deemed a nonconforming use as provided for in this ordinance.

No case has yet arisen where an owner demands the right to build a store on a lot in a residence district because it has been used for a miniature golf course and is therefore stamped with a nonconforming business use. The mere opening up of these possibilities shows how new inventions bring new problems.

E. M. B.

A CITY PLANNING COMMISSIONER FOR THE CITY OF NEW YORK

At last the city of New York has a city planning commissioner. The story is a long one. Four years ago Mayor Walker appointed a committee of about 450 citizens to make a survey of needed city planning. The final report of this committee made it clear that Greater New York needed a city planning commission. A legislative bill, which would have created a thorough-going city planning commission of three with adequate powers, was pending in the state legislature for two sessions but failed to pass, largely on account of opposition of the borough administrations. The borough presidents, while admitting the need of planning for the city as a whole, considered that co-operation between them would take care of all the city's needs. They were averse to increasing the power of the central authority and referred constantly to borough autonomy. Mayor Walker, however, being unwilling to give up the idea of a city planning authority, had a local bill prepared which omitted all those powers of the planning commission which needed state authorization. This local bill substituted one man, called the commissioner of city planning, for the city planning commission of three men provided for in the state bill. This local bill was passed against the opposition of some of the borough presidents in the Board of Estimate, and on November 6 the new commissioner took the oath of office. He is to receive \$17,500 a year. His functions are advisory only,—just about those of a Massachusetts planning commission. His duties include the preparation of a master plan of the city and also a model that will be helpful for study purposes. His advice must be asked on all city planning matters before action is taken. He will be asked to report on all zoning proposals, and in working out his master plan it is expected that he will include future zoning of a comprehensive nature. This will be an assistance in passing on petitions for changes in the zoning maps, and it is hoped that he, in conjunction with the chief engineer of the Board of Estimate, will

insist on a comprehensive zoning map which, as it is gradually enacted, will intimately relate to the health, safety, comfort, and general welfare of the community. It is also hoped that his master plan will show a coördination of zoning with streets, parks, parkways, sites for public buildings, and routes of public utilities. The great needs of New York City now relate to the city as a whole and not so much to each borough as was formerly the case. Bridges, tunnels, and subways have unified the city although it still consists of five boroughs. There is no doubt that the newly established department with an adequate staff of engineers will serve to bring to the front the sound planning of inter-borough improvements as well as intra-borough improvements.

E. M. B.

RESTAURANT AND INCIDENTAL USES

Many cities allow hotels or boarding houses in residence districts. Both kinds of buildings have central dining rooms and, in case of hotels, guests come to this dining room much the same as to a public restaurant. A restaurant standing by itself is a business use and can be excluded from a residence district. Some hotel and boarding-house keepers make trouble for municipal authorities by placing restaurant signs outside of their buildings. Many officials as well as citizens are confused on this score and wonder why, if the owner can operate an eating place, he cannot put out a sign calling it a restaurant. The distinction, however, is clear. The common dining room is incidental to a hotel or boarding house. The occasional guest for one meal cannot well be excluded. A restaurant, however, is a business use. Therefore restaurant signs cannot be placed outside of a building in a residence district, nor can a restaurant pure and simple be operated in such a district. Court cases are so few on this troublesome subject that a recent decision of a criminal court in the city of New York is remarkably interesting. It is referred to in 225 N. Y., App. Div. 860, but as far as we know is not printed in any report.

DECISION OF THE COURT

On April 26, 1928, an order was duly issued by the Superintendent of Buildings that was served on April 27, 1928, on the defendants, charging the defendants with a violation of Section 3 of the Zoning Law, namely, that of occupying the west portion of the first floor of the building known as "The Murray," at 66 Park Avenue, in the City and County of New York, as a public restaurant, the same being in a residential district.

Section 3 of the Building Zone Resolution permits in a residence district only the accessory uses customarily incident to the authorized uses, and states that: "The term 'accessory use' shall not include a business."

* * * * *

The restaurant privilege in 66 Park Avenue was rented out for the sum of \$3600 a year and was admittedly conducted as a business at first. The restaurant is still operated by the 66 Park Avenue Ship Grill Corporation, in which the words "Ship

Grill," in themselves, indicate the conduct of a business, being the trade name of the restaurant, while the symbol of a ship is its trade mark. The Milray Corporation, one of the defendants, is the lessee for a long term of years of the fifteen-story apartment hotel located at the southwest corner of 38th Street and Park Avenue in this city. The 66 Park Avenue Ship Grill Corporation, another defendant, is the sub-lessee of a part of the first floor, and occupies such space as a restaurant. The defendants concede that there is a movable sign which is usually kept on the 38th Street side of the building, which reads as follows:

"THE MURRAY
APARTMENT HOTEL
2 & 3 Room Suites
Furnished & Unfurnished
Apartments
(Picture of a ship)
SHIP GRILL
RESTAURANT"

There is a picture of a ship or sign of a ship in each of the three windows in the westerly part of the building facing on 38th Street, and the door to the west of the main entrance of the hotel contains the word "Entrance" with an arrow pointing toward the main entrance of the hotel.

* * * * *

The sidewalk sign shown in People's Exhibit 3 has been in front of the premises of 66 Park Avenue since the first visit of Inspector Fullam on December 13, 1927. The photograph of the sign was taken by Assistant Engineer Close on January 31, 1928. An examination of this photograph shows that the emblem of the ship and the words "Ship Grill Restaurant" take up exactly half of the sign, the lower half. They are the most conspicuous things about the sign, as there are five lines of inscription above the center of the sign and only the ship and two lines of inscription below the center. The letters of the words "Ship Grill" are also larger than any of the letters on the upper half of the sign. The conspicuousness of the restaurant portion of the sidewalk sign is significant. If there were only the word "Restaurant" on the sign, this word would not in itself indicate that there was a public restaurant in the building. But the unusually large words, "Ship Grill," coupled with the picture of the ship, are fully intended to attract the attention of the passer-by to the fact that there is a restaurant on the premises, and that it is the most important feature of the building, if the space devoted to it on the sign and the size of the letters are any criterion; more important apparently, than the fact that there are apartments available. If the passer-by happens to be looking for a public restaurant, the sidewalk sign would be sure to catch his eye. . . . If the ships on windows, door and sidewalk sign, and the word "Entrance" and the arrow were not essential to the conduct of the "Ship Grill Restaurant," why have they been maintained? They must be regarded as signs, signs of a public restaurant, and very important ones, otherwise they would not have been maintained on the premises right up to the present time; and Mr. Fox makes the statement here to-day that they still exist.

The Court cannot agree with the statement of Counsel for Defendants that the ships on the three restaurant windows, on the outside door, and on the sidewalk sign are there for ornamental purposes, but rather for the sole purpose of indicating to persons residing elsewhere than in the apartment hotel, 66 Park Avenue, that there is a public restaurant on the premises known as the "Ship Grill Restaurant." It is obvious that residents in the building would not need to be shown, by any sign inside or outside the premises, where the dining room is. For the benefit of persons seeking apartments in this hotel, the only conceivable thing needed on an outside sign is the

one word "Restaurant." The giving of any name like "Ship Grill" to a restaurant in such an apartment hotel is in itself an indication that the restaurant is advertising for business from the public, as shown by the fact that the same words, "Ship Grill," underneath the symbol of a ship, were on the invitation which was received in June, 1927, by a resident in another apartment hotel on Murray Hill, testified to by Mr. Fox, the invitation reading: "J. P. Marvel invites you to the Ship Grill in The Murray, at 66 Park Avenue, S. W. Corner of 38th Street. Breakfast, Lunch, Tea, Dinner."

The pictures of the ships, when considered in conjunction with what is on the sidewalk sign, and the previous history of the Ship Grill Restaurant, are clearly in the nature of a sign and are part of the invitations to the public to enter the building and patronize the restaurant.

The "Ship Grill Restaurant" is therefore a public restaurant because the general public is being invited to enter the place, first, by the sidewalk sign with its conspicuous trademark, a ship, and its trade name, "Ship Grill," added to the word "Restaurant"; secondly, by the pictures of ships on the restaurant windows, to show to the public in what part of the building the "Ship Grill Restaurant" is; and, finally, by the ship on the outside door, with the word "Entrance" over the arrow, pointing out to the public just where to find the way into the restaurant, which has the ships portrayed on the glass.

* * * * *

When a question is raised as to the invasion of a residence district by a business use, the residence district should be given every possible protection. The Superintendent of Buildings is endeavoring to give such protection and is trying to prevent public restaurants from operating in apartment hotels in residence districts. In a residence district, all restaurants should be very closely circumscribed and every indication of carrying on a public business should be thoroughly scrutinized. If the public is allowed in any numbers to patronize the restaurant of an apartment hotel in a restricted district, it may prove a nuisance to the adjoining owners and an injury to a whole residential area like Murray Hill.

For the reasons stated, the Court is satisfied beyond any reasonable doubt as to the guilt of the defendants. The Court, therefore, finds these defendants, The Milray Corporation and the 66 Park Avenue Ship Grill Corporation, guilty as charged.

E. M. B.

GARDEN CITIES AND REGIONAL PLANNING

It was inevitable that the Garden City Movement, intent on overcoming the difficulties of its experimental work of building new towns, and the town planning movement, engrossed in the necessity of bringing the haphazard growth of existing towns under the guidance and control of planning, should for a time travel separately along parallel lines. It is unfortunate for both that the separate tracks have been too long followed in this country; and it is high time that both movements should fully recognize that they are members one of another; that each has a necessary contribution to make to the better distribution of the people, their industry and their play, which is the basis of all sound regional planning.

—From *Decentralization* by Dr. Raymond Unwin as reported in *The Journal of the London Society*, Sept., 1930.

LEGAL NOTES

Conducted by FRANK BACKUS WILLIAMS

ESTHETIC REGULATION AND THE CASE OF GENERAL OUTDOOR ADVERTISING CO. v. CITY OF INDIANAPOLIS

It is still considered to be the law in this country that the police power, in the exercise of which no compensation need be made, cannot be employed for an esthetic purpose. The need of such regulation, advocated by some for the control of the design of private structures facing public streets and elsewhere in public view, is more and more felt by the general public with regard to billboards; for eminent domain, with special action and compensation in each instance, is impracticable.

It has often been claimed of late by the advocates of esthetic regulation that the courts in cases with regard to billboards are actually sustaining the use of the police power although they do not say so. Those so claiming point out that structural regulation of these boards, unnecessary as such, is really sustained because the boards are ugly, the courts of late justifying such action on the ground that esthetic considerations are an auxiliary consideration when they are in fact the only tenable basis for the decision. This has gone so far that courts are beginning to say that billboards are structures in a class by themselves. If so, it is because they are so often a gross disfigurement of the street picture or the country landscape.

A late case in point is *General Outdoor Advertising Company v. City of Indianapolis*¹ in which the court passed upon a city ordinance prohibiting billboards within 500 feet of any park or boulevard within the city. The ordinance was upheld, although admittedly esthetic, because "esthetic considerations enter to a great extent, as an auxiliary consideration, where the regulation has a real and reasonable relation to the safety, health, morals or general welfare [cases cited]; and where a regulation of billboards does not apply to an entire city, but merely applies to billboards in close proximity to public parks or boulevards,² it may properly have a relation to the public health, comfort and welfare which it would not otherwise possess."³

¹172 N. E. 309 (June, 1930).

²The boulevards being, as the court states in another part of its opinion, a part of the park system of the city.

³The court sustained the ordinance as a prohibition of the erection of future billboards in the localities in question, but held that the enabling statute did not authorize the city to pass an ordinance for the destruction of existing billboards without compensation.

It is well settled law that the police power may be applied retroactively; but in this case the court did not need to pass upon that doctrine, and did not do so.

The editor, agreeing with the result reached by the court, does not entirely follow their reasoning. He fails to find as a basis for the invocation of the police power any but esthetic grounds pure and simple, since the only reason why billboards in close proximity to public parks have a relation to the public welfare that they would not possess elsewhere is that in such surroundings they are ugly, when in some of the localities, as, for instance, many business or industrial neighborhoods, they would not be so, or, at least, so much so. In other words, the court, while it would not sanction the prevention, without compensation, of a lesser degree of ugliness, will sustain the prevention of a gross disfigurement of the city.

ENGLAND'S GARDEN CITIES TO-DAY

Letchworth is a prosperous town, affording the advantages which its founder foresaw, and showing by its strong financial position that Ebenezer Howard's remedy is as sound economically as it is helpful socially. Welwyn, the second Garden City, follows hard on the heels of Letchworth, able to profit by the experience there gained, and bids fair to complete the experimental stage.

Financially, Letchworth has had time to prove its soundness. It is paying its full current dividend and annual installments of that held over for the earlier years. Its assets show a balance of over £285,000 above the liabilities.

In health both stand supreme. The higher of the two death rates for 1928, that at Letchworth, being 6.3 per 1000 against 12.1 for London. If the Letchworth death rate had applied to the London county area, the number of deaths would have been 28,061 instead of 53,895, a saving of 25,834 lives.

The infant death rates are even more remarkable. Deaths under one year per 1000 births:—London 67, Letchworth 22.6, Welwyn 6.17. If the Letchworth rate had held in London there would have died in the year, 1646 in place of 4879, a saving of 3233 deaths of children.

Both Letchworth and Welwyn are industrial towns. They have succeeded because they offer advantages for industry. The industrial area is laid out for convenience. There is space for expansion. The workers enjoy better health, lose less time and are more contented and efficient. Letchworth has attracted 110 factories and workshops and has a population of about 15,000. Welwyn has 45 industries and a population of about 8500.

—From *Decentralization* by Dr. Raymond Unwin as reported in *The Journal of the London Society*, Sept., 1930.

N. C. C. P. & A. C. P. I. NEWS

Conducted by FLAVEL SHURTLEFF, Secretary

INSTITUTE MEETINGS IN DENVER AND NEW YORK

At the annual meeting of the American City Planning Institute, held in Denver during June, "The Planning of Neighborhood Store Centers" was the subject of a paper by Mr. S. Herbert Hare, of Kansas City. Mr. Russell V. Black, of Philadelphia, presented a paper on "Effective Planning and How It May Be Accomplished." The sessions were the best attended in the history of the Institute. At the business meeting the new Governors elected were: Tracy B. Augur, Edward M. Bassett, S. R. DeBoer, Henry V. Hubbard, John Nolen, L. Deming Tilton, and Joseph T. Woodruff.

Ten new members and two associate members were elected.

At the Governors' Meeting which followed immediately after the evening session, the following resolutions were passed unanimously:

1. That schools of city planning be urged to arrange their courses with a basic training in architecture, landscape architecture, and municipal engineering.
2. That the President of the American City Planning Institute appoint a member of the Institute to collaborate with the Committee on City and Regional Planning of the American Institute of Architects in a study on "Individuality in City and Regional Areas."
3. That a committee be appointed to coöperate with the Committee on City and Regional Planning of the American Institute of Architects and other agencies in the establishment of an architectural and city planning news service bureau.

The officers for the year are: Robert Whitten, President; Henry V. Hubbard, Vice President; Flavel Shurtleff, Secretary.

At the fall meeting of the Institute, held in New York City on December 6, 1930, the subject, "Express Highways," was discussed by Messrs. Robert Whitten and Harold M. Lewis, members of the Institute, and Fritz Malcher, whose recent writings on the steady-flow system of traffic have received much publicity. There were forty members present. Five new members were elected at the Governors' meeting. It was decided to hold the next meeting on January 17, probably in New York City. The subject, "Neighborhood Planning," and the final report of the Committee on Zoning Principles will be discussed.

BOOK REVIEWS & LISTS

Conducted by THEODORA KIMBALL HUBBARD

AIRPORTS: Their Location, Administration, and Legal Basis. By HENRY V. HUBBARD, MILLER MCCLINTOCK, and FRANK B. WILLIAMS. Assisted by Paul Mahoney and Howard K. Menhinick. Cambridge, Harvard University Press, 1930. 190 pages. Photographs, plans, charts. 10 x 7 inches. Price \$3.50. (Harvard City Planning Studies, Volume I.)

This volume is the first publication growing out of the research activities of the new graduate School of City Planning of Harvard University, conducted under the general direction of Henry V. Hubbard with Mrs. Theodora Kimball Hubbard as Editor of Research. This choice of the airport and aerial traffic as the first subject for attention is in the full spirit of city planning. City planning is the exercise of intelligent foresight for prevention of maladjustments, thereby minimizing the need for their cure. Consequently, in any new type of human activity, such as aviation, which involves the use of land or the movement of persons or things, city planning foresees or should foresee the problems before they become acute. City planners could hardly be expected to be such miraculous previsionists as to be able, before the day of the Wright brothers, to know that the successors of Daedalus would be numerous enough to create an air traffic problem, or that the descendants of Icarus would have hills and skyscrapers, rather than the sun and wind, to fear. We have a right to expect from them, however, sufficient imagination and courage to foresee the relationships of airport location and aerial travel to the other activities of contemporary life and to insist that adjustments be made through city planning technique. This book demonstrates a realization of this responsibility and that its warnings have come none too soon.

There are three parts: "The Airport in the City Plan" by Mr. Hubbard, assisted by Mr. Menhinick; "Airport Administration" by Dr. McClintock, assisted by Mr. Mahoney; and "The Law of Airports" by Mr. Williams. Naturally it is in Mr. Hubbard's part that city planning is most stressed; and particularly commendable is his emphasis upon the application of the planning viewpoint that the location of an airport is to be considered, "not only from the point of view of air transportation, but also from the point of view of the greatest efficiency and the least mutual harm for all the community which shall result from devoting so considerable a portion of its area to one specific and exclusive purpose."

This book is so compact and concise that a summary is impossible without quoting almost the entire text. Get it and read it all, is about the best

advice a reviewer can give. Every problem connected with airport location seems to be mentioned and discussed in the forty pages of Mr. Hubbard's text—size, runway dimensions, shape, topography, atmospheric conditions, physical surroundings, and so on. There are three chapters and the topics covered are indicated by the titles: "Physical Characteristics of Suitable Airport Sites," "Functional Relation of the Airport to the City and Region," and "Relation of the Airport to the National Transportation Net." The various types of airports and fields—central terminal, storage, parking, suburban, private—are described and their location discussed. The relations of the airport to airways, railroads, waterways, highways, residential districts, commercial districts, and recreational systems are treated and each receives its clear and precise presentation. The problems being so new, Mr. Hubbard, as well as the authors of the two other reports, refrains from dogmatism or claiming the final word upon principles and standards. The exhilarating characteristic of Mr. Hubbard's report is its permeating insistence upon and convincing demonstration of the principle that the location of an airport is a city and regional planning problem and to be determined as such, from the point of view of both the functional efficiency of the airport itself and the protection of the non-aerial phases of urban life.

The inclusion, in the first research project of a city planning school, of a report on airport administration, represents an encouraging recognition that planning and administration are intimately interrelated. Theoretically this interrelationship seems obvious; but the city planning movement is much in need of extensive and intensive discussion and demonstration of just how and why the quality of administration is affected by the location of public and private works and activities, and how and why, in turn, the planning of location needs to take into account the other factors which produce the problems of administration. Unfortunately, Dr. McClintock's report, while he states that "the coördination of the airport with the city plan is of primary importance," really pays no further attention to the point,¹ and does not attempt to explain or prove the interdependence of planning and administration. His report is, indeed, little more than a catalogue of the main types of airport departmental organization in various cities, plus a sort of elementary manual for airport administrators dealing with such details as the kind of lighting and fire prevention apparatus to be used, how much to pay for the land, how to get the money, and so on. There is some discussion of the municipal owner-

¹The editor of *CITY PLANNING*, speaking for the moment in his capacity as one of the collaborators in the volume under discussion, feels that it ought to be said here that the general city planning considerations by whomever suggested were by agreement put into the first of the three reports. Included among these considerations, for example, was the idea of a system of airports differentiated according to function and hence as to administration,—an idea to which the authors of the second section of the report largely contributed. This allotment of material would seem to have produced the effect noticed by Mr. Bettman, of a too strict confining of administration considerations within the boundaries of the airport.—H. V. H.

ship and operation of airports, with a decided slant against public, as distinguished from private operation, but without anything approaching a convincing presentation of the issue. In regard to the details of administration, the treatment is largely descriptive of things as they are, with little attempt to evoke basic principles or standards.

Mr. Williams' report on *The Law of Airports* has the clarity and felicity of statement and the comprehensiveness of subject matter which are characteristic of him, and, as might be expected of him, the list of citations to statutes and cases is complete. He shows how little we need to worry about such questions as who owns the air or air spaces. Aerial navigation is shown to be so predominantly interstate commerce that such problems as the relative jurisdiction of federal and state authority are answered by the principles and decisions which have developed out of railroad regulation, and the courts will be able, by the application of well known legal principles and the traditional forms of adjustments, together with techniques such as zoning, to permit an effective government of the air and afford convenience and safety to travelers by air while protecting the person and property of the man on the ground against an undue amount of noise, dust, or other nuisance. The fundamental laws or legal considerations are the same for airports and air travel as for traditional forms of transportation on land and water, but particular applications thereof are still in a formative state, and Mr. Williams rightly and modestly refrains from dogmatic and final conclusions.

The book has extensive appendices which reflect the thoroughness with which the factual data were gathered in this piece of research. There are a number of interesting illustrations of airports and their buildings, as well as airport plans. An immense amount of energy and information have been concentrated in this little book of, with index and all, 190 pages, and there can be no doubt that, in so far as it seeks to cover the subject, it will be authoritative.

ALFRED BETTMAN.

THE FUTURE DEVELOPMENT OF SOUTH-WEST LANCASHIRE:

The Report of the South-West Lancashire Joint Town Planning Advisory Committee. Liverpool, University Press; London, Houghton and Stodder, Ltd., 1930. 166 pages. Photographs, maps and plans (some colored, one folded), cross-sections, tables. $12\frac{3}{4} \times 10\frac{1}{4}$ inches. Price 10s. 6d.

To American readers, this report of the South-West Lancashire Joint Town Planning Advisory Committee has a particular appeal because Liverpool, the heart of the region, has been the gateway to England for so many of us. The great industrial hinterland may be unguessed to the traveler steaming up the Mersey, but those who have motored northward to the Lakes

or southward along the Wirral Peninsula toward Chester can imagine the many and complicated problems in the development surrounding one of the leading ports of the world.

Following the introductory explanations of the topography and history of the region, the report is well organized into four sections: zoning for future building and non-building uses, communications, open spaces, and amenities. In the chapter on zoning, amenity is again given due weight in the discussion of how undesirable "ribbon development" may be curbed. The proposed general scheme of urban development in the region and the desirable extensions to existing towns, together with a proposed ring of new satellites, are outlined. An interesting feature of the plan for a system of open spaces is the "semi-public" space where certain rights of access are given the public, the land remaining in private ownership. The chapter on amenities deals with the aspects of landscape preservation and the nurturing of historic individuality now especially before the public through the Society for the Preservation of Rural England, as well as urban improvements such as overhead wires, litter, and smoke pollution.

This report is an exceptionally handsome volume, the illustrations are intelligently selected and arranged, both plans and photographs, to give citizens of the region and other readers a real idea of the objects of the report. The avowed purpose of the Committee was "to produce a smooth, readable, and not-too-technical study of the problems of town development and the preservation of the countryside," and the fine appearance of the pictures will undoubtedly be a major factor in the local success of the report's proposals.

T. K. H.

PLAN OF GENERAL DEVELOPMENT, MELBOURNE (AUSTRALIA).

Report of the Metropolitan Town Planning Commission, 1929. 308 pages. Photographs, folded maps, diagrams. $13\frac{1}{2} \times 8\frac{1}{2}$ inches.

This elaborate and monumental report, based on more than five years of study, is concerned with an area of approximately 250 square miles lying within a 13-mile radius of the heart of Melbourne and containing a population of about 1,025,000. Few cities of this population occupy so large an area. The commission has come to the conclusion that while this may be beneficial in many respects, there "can be no doubt that the scattered development, combined with the extraordinarily large area in which Melbourne's 1,000,000 people are housed, has contributed substantially to the high cost of living and of overhead business expenses."

The city planning problems of Melbourne are the problems of American cities. Consequently, the customary divisions of planning—thoroughfares, zoning, public recreation, public utilities, housing, land subdivision, civic art, etc.—are represented by sections in this report. Melbourne, like Anytown, U. S. A., is struggling with the difficulties of too much land allotted for busi-

ness uses. In the metropolitan area there is at present one shop to every forty-four inhabitants. The subdivision of too much land into business sites in suburban areas is believed to be one of the chief causes of the somewhat unsatisfactory development of business streets. Australian as well as American planners are concerned with the question of open space standards. The commission recommends the acquisition of five acres of open spaces for every 1000 people, to be apportioned on the basis of $\frac{1}{4}$ acre for children's playgrounds, 3 acres for playing fields, and $1\frac{3}{4}$ acres for general parks and for sports requiring only small areas.

The traffic diagrams in color and many of the maps are elaborate and well done. Several novel methods of presentation, worthy of study, are illustrated in this report.

More extensive and detailed reviews may be found in the *Journal of the Town Planning Institute*, July, 1930, and in *Community Planning*, the official organ of the Town Planning Institute of New Zealand, September, 1930.

H. K. M.

THE CHANGING URBAN NEIGHBORHOOD: from Neighbor to Nigh-Dweller, a Sociological Study. By BESSIE AVERNE MCCLENAHAN. Los Angeles, University of Southern California, 1929. 140 pages. 9 x 6 inches. Price, cloth \$2.00, paper \$1.25. (University of Southern California, Social Science Series, number 1.)

This study of the social changes taking place in a district which is being converted from one type of use to another should serve to remind city planners that behind their zoning maps and in their zoning districts live human beings.

A limited territorial area, largely middle-class, in Los Angeles, California, was selected for observation. The prodigious task of conducting a house-to-house canvas to interview 649 families living in the section no doubt brought to light information which would not have been fairly evident beforehand to an intelligent observer reasonably familiar with the district, and it also furnished that host of direct quotations in the homely phrases of the persons interviewed which lend an intimate, gossipy flavor to almost every page of the text.

A chapter devoted to the study of neighborliness analyzes the subject and divides it into three degrees of social nearness illustrated by "participation," as evidenced by the exchange of calls and the extension of friendly services and so forth, "limited participation," as manifested in the mere exchange of greetings, and "non-participation," as indicated by abstention from association. The term "nigh-dweller" is used to emphasize adjacent residence as opposed to the more intimate relation connoted by the term "neighbor."

A description of the problems of the negro and Japanese invasion of the district, contained in a section entitled "Crises and Means of Control," was, to the reviewer, by far the most interesting chapter of the book.

H. K. M.

THE LEISURE OF A PEOPLE: Report of a Recreation Survey of Indianapolis. Directed by EUGENE T. LIES, Special Representative, Playground and Recreation Association of America. Indianapolis, Council of Social Agencies and Indianapolis Foundation, 1929. 571 pages. Maps, tables. 9 x 6 inches. Price \$1.50.

Play is admittedly a vital element in a balanced program of living. Modern machinery, increasing the amount of leisure time, has made imperative the provision of greatly increased recreational guidance and facilities.

This survey report compares the opportunities for recreation offered by the many different kinds of organizations in the city of Indianapolis with those offered by similar groups in other cities of approximately the same population, and suggests possible improvements. Each of the fifty-nine districts into which the city was divided for the purposes of this study is analyzed from the standpoints of population, zoning, housing, economic status, available recreation facilities, and recreation needs. Special chapters deal with the acquisition of play space through land subdivision control, opportunities for adult leisure-time studies, social work and recreation, and municipal camps. An appendix contains samples of questionnaire forms used, and a bibliography.

The Council of Social Agencies under whose auspices this study was conducted has organized a Recreation Committee as a continuing organization to translate into actual accomplishments the recommendations of this admirable report.

H. K. M.

A REPORT ON THE PARKING AND GARAGE PROBLEM OF THE CENTRAL BUSINESS DISTRICT OF WASHINGTON, D. C. By MILLER McCLINTOCK, Erskine Bureau, Consultant, and the Staff of the National Capital Park and Planning Commission, Charles W. Eliot 2d, Director of Planning. Washington, The Automobile Parking Committee, 1930. 81 pages. Photographs, diagrams, tables. 9 x 6 inches.

Unless preventive action is taken, the already acute parking and garage problem of the central business district of Washington will become intolerable when the Government building program in the Triangle is completed. The Automobile Parking Committee of Washington was organized at the suggestion of Lieut.-Colonel U. S. Grant, 3d, to sponsor a survey of the problem and to propose recommendations for its solution. The resulting comprehensive and thorough-going study is reported in this recent pamphlet which in many respects forms a companion volume to the United States Department of Commerce report on Vehicular Traffic Congestion and Retail Business, published in 1926.

H. K. M.

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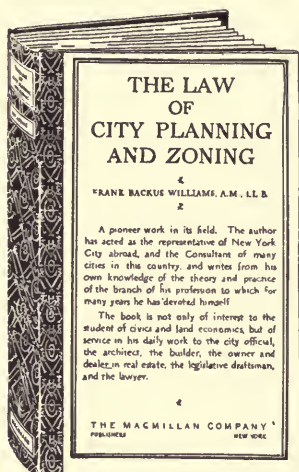
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THINGS TO CONSIDER NOW

- Round corners of dangerously intersecting streets.
- Provide regulation traffic lights and danger signals.
- Widen and coördinate your streets, correct grades and straighten same, and edge stone sidewalks.
- Provide drainage.
- Provide airports.
- Provide bathing, skating facilities for recreation, and comfort stations for convenience and sanitation.
- On main thoroughfares in congested area put telephone and electric wires underground.
- Establish building lines on narrow streets to enable gradual widening at minimum cost.
- Develop sidewalks for safety of young and old.
- Develop public disposal dumps under care and supervision.
- Provide adequate water facilities and sewerage.
- Consider carefully growth and its relation to schools, fire stations, libraries, and other civic buildings.
- Provide or enlarge parks, playgrounds, and town forests.
- Beautify and landscape school grounds, playgrounds, and parks.
- Provide ornamental street signs and boundary-line signs.

W. FRANKLIN BURNHAM,

Chairman, Massachusetts Federation of Planning Boards.



Books for City Planners

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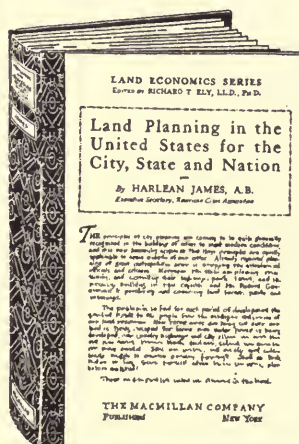
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HENRY VINCENT HUBBARD, EDITOR HOWARD K. MENHINICK, ASSISTANT EDITOR

CONTRIBUTING EDITORS

EDWARD M. BASSETT

FRANK B. WILLIAMS

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Courtesy National Commission of Fine Arts

THE MONUMENT GARDENS AND MALL LOOKING TOWARD THE CAPITOL
A General View, from the Plan of 1901

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THE CITY AS A WORK OF ART

By CHARLES MOORE

Chairman, National Commission of Fine Arts

WHAT is the place of beauty and artistry in the design of a city? First, let us agree on a definition of city planning,—its aims and its achievements. The building of a city has much in common with the building of a single architectural structure. Since we are thinking at present so much in the terms of humanism, I quote that old English humanist, Sir Henry Wotton: "Well-building hath three conditions: Commodity, Firmness, and Delight."¹ These three conditions are even more applicable to building a city than to constructing a building. It is only when these three distinct conditions are blended in a single result that the city gives to its citizens supreme satisfactions of daily living.

Just what is "Firmness"? By Firmness as applied to a city is meant those physical characteristics of topography which direct the city's development. For example, the great plains which from earliest times conduced to the growth of London, Paris, and Berlin; the abundant stone, the navigable rivers, the convenient highways of travel. Such natural features are at once opportunities and bonds. No city planner can escape them if he would. They are to him what thrust and balance, pressure and its support are to the

¹"The Architecture of Humanism: a Study in the History of Taste" (Scott).

architect. To deal with them he calls science to his aid, abides by its laws, utilizes its forces. In so doing he gives firmness, stability, permanence.

Next, what of "Commodity"? Man makes the city to live in: to satisfy his external needs, his social and political and religious proclivities, his vocations and his avocations. Thus the city becomes an expression of human life; and so it has been throughout the ages. The history of civilization finds its truest record in the cities man has built to satisfy his daily needs; and the record is all the more convincing because unconscious. Courts of justice and their complement in jails, halls of legislation and administrative offices, schools and colleges and hospitals, factories and shops,—all these factors of civilization enter essentially into the disposition of the city and therefore into the ken of the city builder. They form what we may term Commodity.

Thus two sets of values have been established, Firmness and Commodity,—each distinct, each necessary to well-ordering of a city. So much all will agree.

Concerning the third condition, the condition of "Delight," there is room for discussion, for differences, for opposite conclusions. To-day it is usual to disregard altogether this element, to scout and scoff and deliberately to reject it as quite beneath the consideration of practical, hard-headed, efficient men. Once in Detroit when I was urging the Common Council to enact an ordinance against the smoke nuisance, the very popular Mayor Maybury quite bowled me over by declaring that chimneys belching black smoke were the surest sign of Detroit's prosperity. To-day a pipeline from Kentucky natural gas fields is being built at a cost of \$25,000,000 for mixed motives of economy and cleanliness.

Yet scoff and deride as one may, still the condition of Delight is one that human nature demands and at all hazards and expense strives to attain. But just because Delight is a matter of taste, and of acquired taste at that, there are many opinions; and too often the less one knows the more insistent he is.

There is little difference of opinion as to street grades and pavements and sewers; there is not much difficulty with zoning, properly understood; but when it comes to ordering a city in a

pleasing manner, immediately the fight is on. I could (but will not) continue indefinitely relating instances humorous, pathetic, tragic, that have come under my own observation of fanciful, misguided, self-interested thwarting of fine plans by men temporarily in authority. And still I firmly believe with Daniel H. Burnham that a good plan well recorded sooner or later wins out.

What is meant by Delight in planning a city? Nothing less than that the entire city shall be planned as a Work of Art. Firmness (or science) and Commodity have their distinct and necessary places; but above and beyond and through all is the condition of Delight. Nothing less satisfies the human mind; nothing short of it gives permanence. Delight is a fundamental condition of a work of art, which is born, Le Corbusier tells us, of a happy conjunction of passion and knowledge.¹

It is not necessary closely to define Delight. It is that supreme quality which the artist strives to put into his work. Perhaps it is compounded of love and skill and thought, all expressed with style. What gives immortality to the Colleoni equestrian statue at Venice and Donatello's Gattamelata at Padua and Saint-Gaudens' Sherman in New York? Certainly not rigid adherence to nature, for all of these enduring works deliberately violate reality in order to obtain the appearance of reality. In the presence of masterpieces one does not question what style is; one feels a sense of satisfaction, of enjoyment, of delight. Here John La Farge's warning comes: "Remember, you do not criticize a work of art; a work of art criticizes you." It asks of you the pertinent question, "Are you capable of enjoyment, of delight; or are you just a self-sufficient critic?"

When we say that the entire city should be planned as a work of art, we are expressing an ideal. Nevertheless that is the bright particular star to which great city planners have hitched their wagons; it is the only star in the firmament to which a man imbued with high conceptions of the true values of life can hitch *his* wagon. Otherwise he will fail to come up to the mark of his high calling.

¹"The City of To-morrow" (Le Corbusier). Etchell's translation.

Now unless you are inspired to "see large,"—to put style into your conceptions, to give delight,—then you will not highly succeed, although you may be very capable craftsmen.

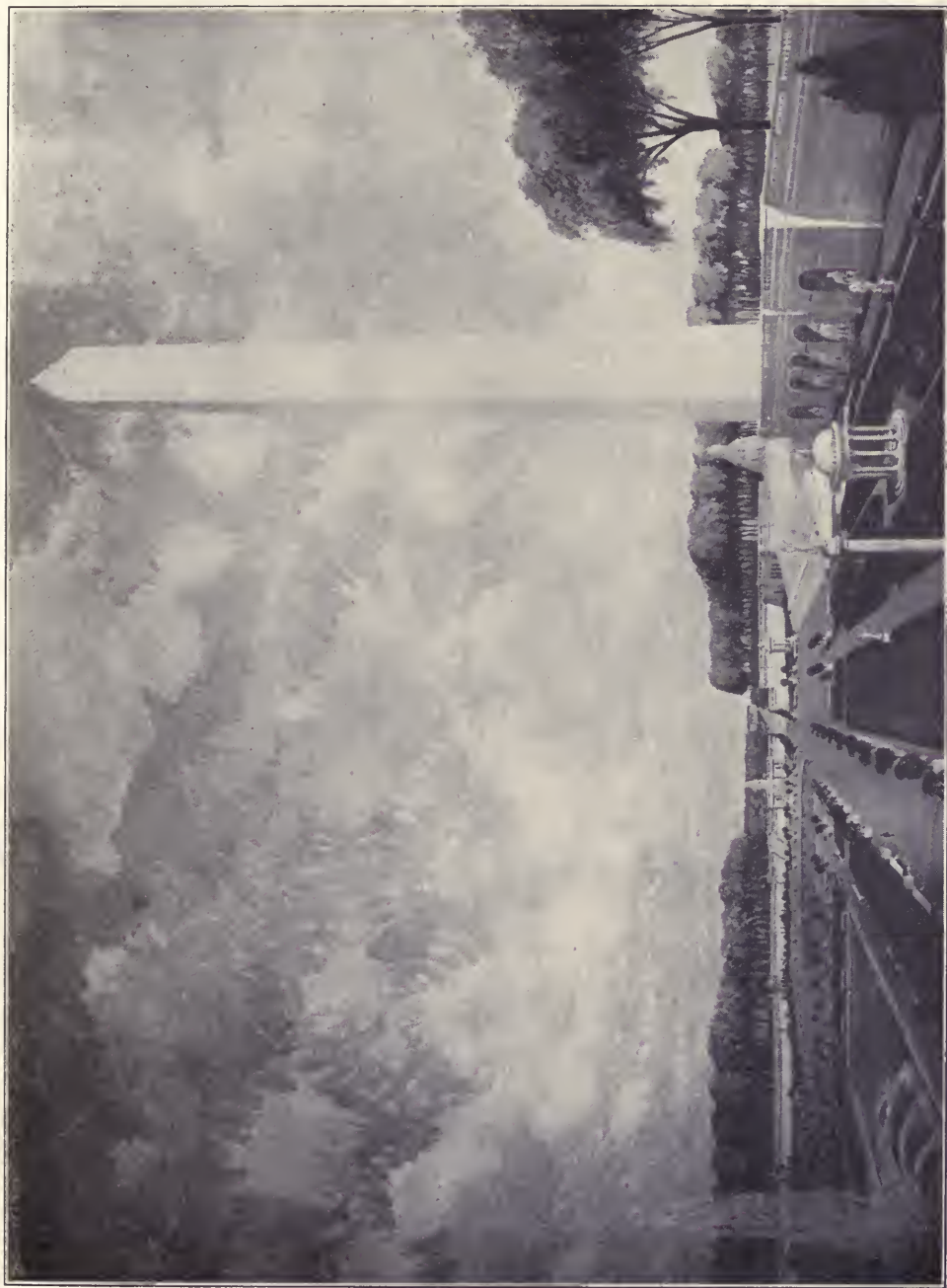
Perhaps we can best illustrate our subject by taking three typical cities and examining the aims and motives that actuated the planners.

Paris is the capital of the world of taste. Just how beautiful, how complete it really is, one never knows until he comes to study its details. This orderliness, this fitting of part to part, was not the result of one man's work. Slowly during the centuries it grew into its present high condition through the continued, persistent desires of the French people and their innate good taste.

Paris in Caesar's day was a cluster of huts on a group of islands in the Seine, at a point where many navigable streams meet. An early organization of boatmen developed during the Middle Ages into the Merchants of the Water, from which the City of Paris sprang. The Romans called the city Lutetia—the White City—because of the beautiful white limestone of the region used for building.

The surroundings of Paris, like those of London and Berlin, were monotonous marshes through which a river flowed. The main east and west roads ran from Orléans to Belgium and Britain. North of the Seine was a crossroad. These two old roads have always been, and are to-day, the chief traffic lines of Paris.

In the fourth century a simple wall was built around the largest island—the Cité—and two bridges were constructed, on sites of present bridges, Pont au Change and Petit-Pont. About 1200 King Philippe Auguste, precursor of Louis XIV and Napoleon III, began the deliberate improvement of Paris with new walls and the fortress of the Louvre. Imagine white Gothic Paris with Notre Dame resplendent in its pristine beauty; with the royal palace, on the site of the present Palais de Justice, placed amidst gardens of oaks under which Saint Louis held his Lit de Justice. The nobles and ecclesiastics owned great landed estates. The merchants perched on the bridges, and the people filled in the interstices as best they could.



Courtesy National Commission of Fine Arts

THE WASHINGTON MONUMENT GARDENS

Designed to restore axial relations with The White House. Plan of 1901

The discovery of America by Columbus is contemporaneous with the beginning of the Renaissance in France. The Renaissance, ending about 1610, gave to Paris the Hôtel de Ville, the Court of the Louvre, and the Pont Neuf, but especially great public squares at focal points, each square surrounded by houses of uniform and suitable design. Richelieu and Mazarin built defensive walls with triangular bastions, called by the people *boulevarts*, synonymous with the English *bulwark* and the German *Bollwerk* and our *boulevard*.

With the majority of Louis XIV in 1659, Paris entered upon its career of splendor and beauty. But for many a long year the plans existed mainly on paper. Years of peace, at least in Paris, caused the old walls to crumble and the moats to be turned into playgrounds and parks,—the only ones the people had.

About 1672 Jouvin de Rochefort, the architect, drew a plan showing the proposed development, now the Champs Élysées, and the Place de la Nation; then came the project of the architects, Bullet and Blondel, drawn by the King's order, utilizing the wall areas for encircling parkways. Then came the invention of the ideal street, never possible during periods of turmoil when people had to live within walls: a street with a well defined roadway for traffic, with trees for shade, with monuments placed in relation one to another, with axial vistas, all based on fundamental ideas of symmetry and good order derived from classical times and never alien to the French mind.

From the architecture of the buildings and the creation of the street, the consultants of Louis XIV passed to the conception of the entire city as a work of art, with a main axis to a great central composition. Happily for Paris and the world, André Le Nôtre (succeeding his father as gardener of the Tuileries) there developed the gardens much as we see them to-day. Le Nôtre, whose genius it was to work even to the horizon, stretched his gardens through the city and out over the hills, sweeping around the Place de l'Étoile (1631) and on without limit.

Versailles and Fontainebleau and many another of Le Nôtre's masterpieces existed, and L'Enfant knew them well. From Versailles, planned as the capital of the French people, L'Enfant took

many features for Washington. But the Paris we know and admire to-day was the actual work of Baron Haussmann under Napoleon III.

Mr. Edward L. Smith, of Columbia, has well said that "the dominant characteristic of his [Haussmann's] administration was its broad appreciation of the work which had preceded. He realized perfectly that he was only one of the many masters who had assisted in the solution of this vast problem, and taking up the task where the older men left it, he finished it in a manner which would have given them supreme satisfaction. . . . The Emperor had taken up the Napoleonic tradition. Like the great Bonaparte he was filled with the desire that the capital of his Empire should be 'quelque chose de fabuleux, de colossal, d'inconnu jusqu'à nos jours.' A crude sort of magnificence would doubtless have satisfied him; but his sense of proportion was correct. He knew that he had a great-growing and proud city under his hands, and that his map must be drawn to fit and please. . . . The Napoleonic dynasty always maintained that it was born of the Revolution, and that its chief function was to accelerate that movement. Napoleon III appreciated fully all the utilities for which the Revolution stood. He had before him a city in which much had been planned, but little accomplished. It was still an old mediaeval town, to which a magnificent modern population was trying to accommodate itself. The sympathetic duty was forced upon him of making a suitable home for these people."¹

I have dwelt thus long on the transformation of Paris because of the analogies it affords to the transformation now going on in Washington. President Washington placed the planning of the American capital in the hands of the French engineer-architect, Pierre Charles L'Enfant, and gave him free rein. L'Enfant knew that the appeal to Washington lay in grandeur, in magnificence, in a project so big that its accomplishment was in the indefinite future. Washington firmly believed he had been instrumental in

¹"Baron Haussmann and the Topographical Transformation of Paris under Napoleon III." *Architectural Record*, Jul.-Dec. 1907.

founding a mighty nation that would become second to none on earth. He was determined that its capital city should be laid out on the largest and finest lines conceivable. An area as large as the Paris of that day was taken for the city itself, with plenty of opportunity for growth. To answer the needs of commerce, Washington included two existing cities within the Ten Miles Square.

Had L'Enfant been less of a visionary and a dreamer, he never would have appealed to George Washington, the greatest visionary and dreamer this country has ever known. Washington brushed aside that reputed prince of dreamers, Thomas Jefferson, because the latter's suggestions were far too small and contracted,—too much in accord with the minute philosophy that dominated his meticulous mind.

Now listen to that appeal made by L'Enfant to Washington to be selected to design the city:

No nation had ever before the opportunity offered them of deliberately deciding on the spot where their Capital City should be fixed, or of combining every necessary consideration in the choice of situation, and although the means now within the power of the Country are not such as to pursue the design to any great extent, it will be obvious that the plan should be drawn on such a scale as to leave room for that aggrandizement and embellishment which the increase of the wealth of the nation will permit it to pursue at any period however remote.

Such were the inspiring words, such the ecstatic vision that won for L'Enfant the planning of the capital of the United States. Such was the common thought of Washington and L'Enfant. There was common ground under their horses' feet as they rode over the hills and through the swamps of the Federal Territory, picking the sites of Capitol and White House, the foci of their grand scheme. Never were two men more in accord as to fundamentals. Both "saw large."

I have seen that first map of L'Enfant's, recently discovered by Colonel Martin in the Toner Collection in the Library of Congress and not as yet published. Out of the white fog of untouched paper rise those two peaks, the Federal Building and the President's House, with their radiating lines stretching to



Courtesy National Commission of Fine Arts

THE TEN MILES SQUARE
The Ellicott Topographical Survey enclosing
L'Enfant's Plan of Washington, 1792

public squares designated as the sites of buildings related to these common focal points. It is like the sketch of some great painter spotting on his canvas indications of the visions of his imagination. Here indeed is the city designed as a work of art.

Washington in Philadelphia was busy with the cares of state, his mind harassed by the mean attacks of little men who applied to his mountain the measure of their molehills. Washington examined the new plans with painstaking care and a trained mind. He saw everything that L'Enfant had made, and, behold, it was very good.

Why then the tragedy of L'Enfant's separation from the work within the year? It is the oft-told story of an artist being drawn into the position of executant. He should not have been allowed to assume such a task. Notoriously he was extravagant. He "saw large" to good purpose; but in every one of his enterprises he saw larger than the pocketbook behind it.

But the plan remained. Washington saw to that. Firmness might have to pause for the slow gathering of financial forces; Commodity might have to await the growth of the nation in wealth; but Delight, as embodied in the plan, became the guiding star, never long obscured by clouds of self-interest or economy, again and again shining forth, and to-day the beacon by which to steer the course of the nation's capital.

Thornton, architect of the Capitol and Commissioner of the District of Columbia, carried on the L'Enfant plan. Then came a long period of uncertainty, during which political disturbances, culminating in the Civil War, caused the great plan to lie dormant and in part to be dismembered. This condition lasted until our own day.

There comes a time in the life of every city when the public sense of Firmness, Commodity, and Delight asserts itself in a movement to reorder the conditions brought about by haphazard growth. I have adverted to the struggles of Paris through the centuries, culminating with the achievements of Baron Haussmann under the third Napoleon, and also to the visions of Washington and L'Enfant to create on the banks of the Potomac an ideal capital for this nation. The object of these discussions is to

impress upon you for your guidance and encouragement the lesson that a great plan, adequately recorded, contains within itself the assurance that some day it will be carried out.

Elsewhere I have told the story of how the Senate Park Commission of 1901 came into being.¹ That Commission was made up of two architects, Burnham and McKim, a sculptor, Saint-Gaudens, and a landscape architect, the younger Olmsted. These men were selected deliberately as artists. No layman's point of view, no utilitarian ends obstructed their artistic vision. Their duty and opportunity it was to make the finest possible plans for the capital of a great and proud nation. "One thing I can say to you," they were told by that hard-headed Scotchman, James Wilson, long Secretary of Agriculture, "unless your plans are finer than any ever made in the history of the world, the American people will have no use for them." He was right. Two years later, when that same James Wilson sought to emasculate those fine plans by narrowing the Mall, Secretary Taft and President Roosevelt smote him with the Big Stick.

After thorough studies of the topography on the ground (much as Washington and L'Enfant had studied it a century before) the Commission wisely decided to go back not merely to the L'Enfant Plan of 1792, but even to the sources of the L'Enfant inspiration. A list of Le Nôtre's work was made, and the architect and landscape architect members made a pilgrimage to Europe. They insisted that I go with them as a source of information as to the District of Columbia, and, particularly, as their one contact with Congress. The idea of the foreign trip originated with Mr. Burnham, who maintained that it was necessary for the members to see with the same eyes and with the Washington work constantly in mind the time-honored precedents for the location of public buildings enhanced by adequate landscape settings, and supported by those highly developed parks which give delight to the people.

There was no thought of originality, falsely so-called. The one object was to find out how problems of planning had been worked

¹"Daniel H. Burnham: Architect, Planner of Cities" (Moore).

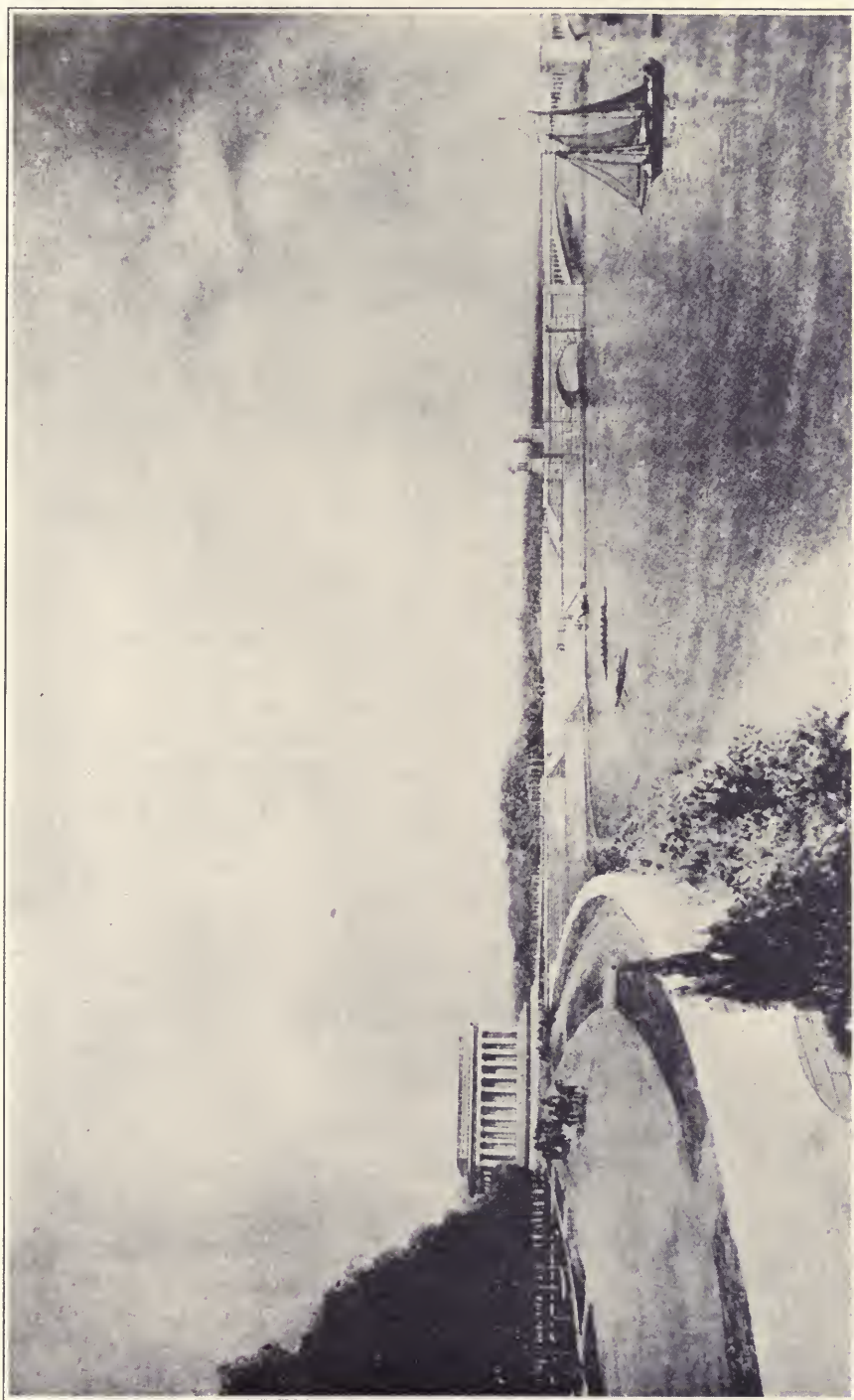
out in the past in such a manner as to give continuing delight, and then to apply that knowledge to the particular, and in many ways dissimilar, problem before them.

I recall vividly one June evening when the quartet, seated on the steps of the beautiful little temple in the gardens of the Villa Borghese, located in imagination the Lincoln Memorial on its mound at the end of a new axis, created by drawing a line from the Capitol through the Washington Monument and prolonged to the Potomac. Now, after many battles, the Memorial stands on a location so logical both historically and artistically that the violent opposition made to that site seems unbelievable. Next the trio went on to redesign and relocate the proposed Memorial Bridge in the general form and position in which it will be opened soon.

The Roman grandeur of Burnham, the Greek fineness and sense of order and proportion of McKim, the feeling for landscape effects of Olmsted, all subjected to the critical taste of Saint-Gaudens,—these fundamental qualities were inherent in the Plan of 1901. After an interval of ten years they began to be worked out with such modifications and adaptations as to make Henry Bacon the architect of the Lincoln Memorial and William Mitchell Kendall the architect of the Memorial Bridge. Both men got their training under McKim. Happily Frederick Law Olmsted has lived to watch and ward the landscape settings.

The new spirit that came over Congress in 1926 represents not so much the impulses of individual legislators as the seething movement of the American people making itself felt through their appointed agencies. Depression in business hastens the impulse as a means of checking unemployment. Change of party control has been provided for in the make-up of Congressional building commissions. The movement is truly national.

During the thirty years that I have been the lay member of the Commission of Fine Arts, which has come to be the guardian of the Plan of Washington, many suggestions for changes have been made, but intensive study of such proposals has shown that fundamentally the Plan is sound, vital, compelling. So it was found when Congress, again greatly moved by an impulse for



Courtesy National Commission of Fine Arts

VISION OF 1901—REALITY OF 1931

The Lincoln Memorial, Arlington Memorial Bridge, Rock Creek Parkway, and Water Gate. Sketch plan of 1901, ten years before Congress authorized these works. The Lincoln Memorial, Henry Bacon, architect, was completed in 1922; the three other features, designed by McKim, Mead & White, will be dedicated in 1932.

Delight as well as Commodity, placed in the hands of Secretary Mellon a building program more extensive than ever before undertaken by any country. With the consistent and persistent coöperation first of President Coolidge and now of President Hoover, that program is being carried out by the associated architects and landscape architects in a manner consistent with the ideals of President Washington,—a program in many of its details planned in honor of the bicentennial of his birth, to be celebrated in 1932.

Listen to President Hoover, speaking at presentation of the Public Buildings Program, on April 25, 1929:

Congress has authorized the beginning of a great program which must extend over many years. It is our primary duty to do more than erect offices. We must fit that program into the traditions and the symbolism of the capital. Our forefathers had a great vision of the capital for America, unique from its birth in its inspired conception, flexibility and wonderful beauty. No one in 150 years has been able to improve upon it. . . . Here on this national stage that great drama of our national life has been played. Here were fought the political battles that tested the foundations of the Government. We face similar problems in our time, and here centuries hence some other Americans will face the great problems of their time. For our tasks and their tasks there is need of daily inspiration of surroundings that suggest not only the traditions of the past but the greatness of the future.

A third illustration of our subject is of quite a different character. Of all cities in the world Chicago would seem to be most chaotic. All the forces of social revolution seem there to find expression. And yet it is in Chicago to-day that highest ideals of city planning are being worked out.

The vision of beauty, the spirit of delight, engendered by the World's Fair of 1893 have never lost potency. Firmness the Fair had none. "That belated Grecian," Charles Eliot Norton, after one burst of surprised enthusiasm, critically said:

Not one of those great façades was an expression of the plan. . . . They were intended for scenic effect; they were magnificent decorative pieces. . . . They expressed the wealth, the ingenuity, the practical

capacity of the people; but they were not the poetic creations in which the vital spirit of a nation expressed itself by means of noble organic structures vitalized by its own superabundant life.¹

No, indeed, they were not; and they were never intended to be. That was to come later; and later it did come, and then the well-remembered delight of the Fair was the driving force.

Fifteen years passed. The buildings of the Fair had gone up in flame like the stage scenery they were, leaving the unburnable earth and water arranged as a park for the delight of the Chicago people. Then the passion of this practical people found expression in the Burnham Plan, the avowed aim and object of which is to make of Chicago the finest commercial city on the globe,—the very best city in which to work and to enjoy the permanent satisfactions of life.

The same spirit which carried out the Exposition in such a manner as to make it a lasting credit to the city (says the report) is still the soul of Chicago, vital and dominant. . . . It finds the men; it makes the occasion; it attracts the sincere and unselfish; it vitalizes the organization, and impels it to reach heights not believed possible of attainment. This spirit still exists. It is present today among us. . . . This spirit—the spirit of Chicago—is our greatest asset. It is not merely civic pride it is rather the constant, steady determination to bring about the very best conditions of city life for all the people, with full knowledge that what we as a people decide to do in the public interest, we can and surely will bring to pass.

The author of the Plan of Chicago has gone. But the Plan lives. Vast sums of money have been spent to make Chicago firm and commodious, according to the Plan. But what keeps interest and determination alert and active are the visions yearly being realized, of the twenty-three miles of parkway out in Lake Michigan, stretching along the entire waterfront of Chicago; the thousands of acres of forest preserves entirely surrounding the city, set apart for the delight of all the people; the transformation of the quarter euphemistically known as "Little Hell" into a place of dignity and beauty; of organic unity imposed upon a great modern city.

¹"Art in America," an unpublished lecture by Charles Eliot Norton.

Well might Mr. Burnham say,—Burnham, the hero of battles of peace fought at Chicago in 1893, at Washington in 1901, at Manila and Baguio in 1905, and lastly, again in Chicago in 1909: “Make no little plans; they have no magic to stir men’s blood, and probably themselves will not be realized. Make big plans; aim high in hope and work, remembering that a noble, logical diagram once recorded will never die, but long after we are gone will be a living thing, asserting itself with ever-growing insistency. Remember that our sons and grandsons are going to do things that would stagger us. Let your watchword be order and your beacon beauty.”

I suppose each member of the Harvard School of City Planning¹ aspires to something beyond earning a living. Otherwise why devote valuable time simply and exclusively to learning those technical things better and more quickly learned in an office? The only excuse for being that such a school as this has is to be found in the discovery, recognition, and pursuit of the eternal verities,—the things that lift man above the work-a-day world and bring him into companionship with the immortals. Such studies, such pursuits, such aims, bring a sense of humility in the face of past achievements; but they stimulate earnest endeavor because of the very lack of taste and of high ideals such as prevails in the world-chaos of to-day. Yet this chaotic world is your world,—the only one you will ever know. Your high training here imposes upon you the duty to make it better.

The one object of this paper is to impress upon your minds that you cannot express the spirit of your times unless you know the sources whence that spirit comes,—the forces that engendered it. Do not run amuck with the Past. You might as well try to overturn a loaded truck with your brightly painted roadster. The Government has gladly appropriated millions to rid the capital of buildings designed in the architectural fashion of their day,—“in the consulate of Mullet.”

¹See editorial on page 116.

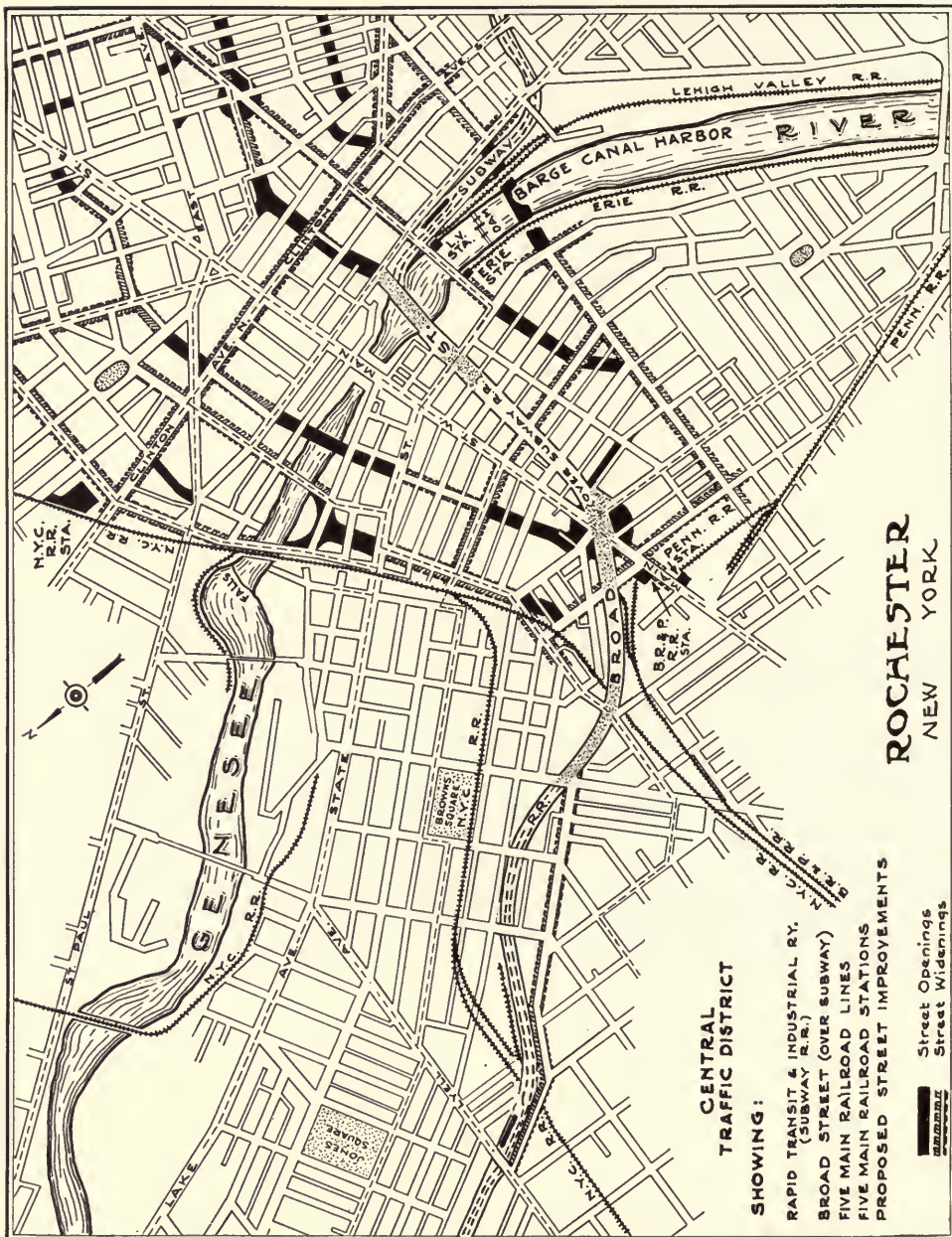
New occasions bring new opportunities, offer new problems. Not problems of archaeology. Not opportunities for self-expression. Simply opportunities to satisfy human wants, to express human ideals in a language that people understand. Human nature does not greatly change. Human wants remain about the same. And of this you may be sure: if your work has beauty, if it gives continuous delight, it will have a good chance to endure even in this world of change. If not, then the end will come quickly, and there will be no mourners.



Courtesy National Commission of Fine Arts

PROPOSED FEDERAL BUILDINGS IN THE TRIANGLE

Board of Architectural Consultants: Edward H. Bennett, Chairman; Louis Ayres; Arthur Brown, Jr.; William A. Delano; Milton B. Medary; Louis A. Simon.
Acting Supervising Architect: James A. Wetmore.



CITY PLANNING IN ROCHESTER

By EDWIN A. FISHER

Former Superintendent of City Planning (Retired)
Rochester, New York

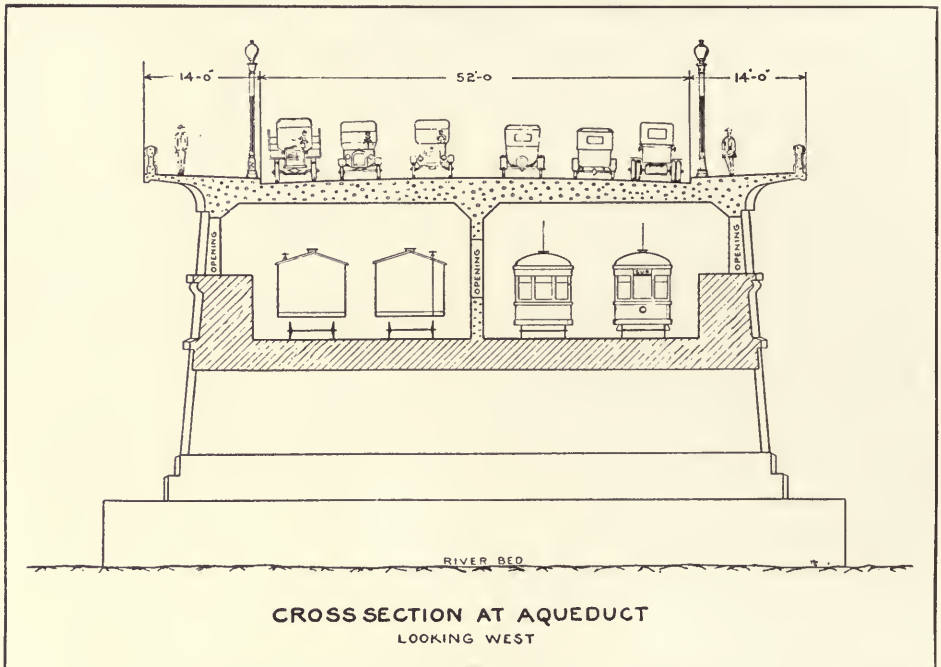
The City of Rochester, incorporated as a city in 1834 with a population of about 15,000, had a population in 1930 of 328,132 and an area of about 36 square miles. Its northern boundary is Lake Ontario. The Port of Rochester on the lake is about seven miles from the center of the city. The Genesee River, flowing through Rochester from south to north, has a drainage area of about 2400 square miles and a fall within the city limits of 260 feet. The water power from the river was the chief reason for the settlement and early development of the city, which in early years was known as the Flour City because of the numerous flour mills within its limits.

The Erie Canal from Albany to Buffalo, completed in 1825, passed diagonally through Rochester, crossing the Genesee River on an aqueduct in the central part of the city. The canal, for a long time an important factor in the industrial growth of the city, in later years became a barrier to its proper development.

BARGE CANAL

By a legislative act and a state referendum in 1903 the construction of a Barge Canal was authorized. The work was so far completed on May 15, 1918, that boats could pass from Albany to Buffalo. The construction of the Barge Canal rendered unnecessary the maintenance of the old Erie Canal. The portion of the Erie Canal extending through the city and the outlying towns between the point where the Barge Canal left it on the east and where it joined it again on the west, a distance of some thirteen miles, was purchased by the City of Rochester from the State at a cost of about \$1,500,000. The part within the city limits, about eight and one-half miles long, was used by the city in the construction of a Rapid Transit and Industrial Railway. This

railway provided a connection between all the steam railroads entering the city and various manufacturing concerns and permitted the taking of three heavy suburban railway lines off the city streets. Through the main portion of the city four tracks were laid,—two for handling freight cars and two for suburban



A section of the abandoned Erie Canal within the city
showing adaptation to traffic uses

and trolley service. Over the canal from Brown Street to South Avenue, for a distance of about one mile, a street generally 100 feet in width was built. With suitable extensions, it furnished an additional east and west crossing of the city.

The construction of the 100-foot street over the Subway Railway in the central part of the city eliminated eight antiquated canal structures. Seventeen old canal bridges of insufficient capacity were replaced with up-to-date structures which, together with enlarged bridges, fitted the modern system of city streets.

A concrete structure on top of the Erie Canal Aqueduct provided an additional river crossing with six lanes for traffic and two sidewalks. Underneath in the prism of the old canal four subway railway tracks cross the river.



Broad Street Bridge over the River

RAILROADS, BRIDGES, AND PUBLIC UTILITIES

Another feature affecting the city plan was the construction of railroads through and into the city. The main line of the New York Central was opened under a different name in 1843. Other railroads from the south came into the city later, the Erie occupying the westerly bank of the river south of Court Street within the city limits, and the Lehigh Valley, still later, the easterly bank of the river.

Originally the New York Central Railroad crossed all the public streets at grade, but in 1882 the tracks were elevated through the main part of the city, thus eliminating some sixteen grade crossings. About this same time the Genesee Valley Canal Railroad, occupying the banks and prism of the old Genesee Valley Canal, came into the city from the south. This railroad is now a part of the Pennsylvania Railroad System.

The Genesee River is crossed by eleven bridges within the city limits. The older bridges of insufficient capacity are being replaced by modern structures complying in every respect, as to utility and beauty, with the new city plan. A granite-faced concrete arch bridge 972 feet long, 82 feet wide, and 170 feet above the river is under construction. This bridge with its approaches, when completed, will be among the notable bridges of the country. The work will be so far advanced at the time of the National Conference on City Planning as to afford an interesting exhibit.

The new college for men of the University of Rochester, completed last year, is located on the easterly bank of the Genesee River.

A necessary adjunct to the city plan is an adequate water-supply. In the period between 1870 and 1873 Hemlock and Canadice lakes, located about thirty miles south of the city in a hilly country, were selected as a source of supply, and a well-planned system of water distribution was constructed. This was very fortunate for Rochester. Additions to this system have been made from time to time as the growth of the city demanded, and plans are now in effect to provide an additional supply from the same territory sufficient for a population of 1,000,000 people.

A comprehensive sewerage and sewage disposal system covers the entire city. There are also 525 miles of streets of which 417.5 miles, or nearly 80 per cent, are improved with hard surface.

PARKS

In 1888 a legislative act authorized the location and acquisition of certain grounds for public parks and parkways in and

near the city of Rochester. The act named a commission of twenty members with the late Dr. E. M. Moore as President. The Commission selected Frederick Law Olmsted as landscape architect.

The principal parks acquired by the original Commission, together with the later park additions, are shown in the following table:

Large Parks	<i>Name</i>	<i>Acreage</i>
	Genesee Valley	639.83
	Durand Eastman	487.91
	Seneca	244.58
	Maplewood	144.61
	Highland	107.30
		1624.23
Neighborhood Parks	<i>Name</i>	<i>Acreage</i>
	Cobb's Hill	62.50
	Edgerton	42.00
	Ontario Beach	32.54
	Webster	10.30
		147.34

There are in addition nine small parks and squares and thirteen playgrounds having a total area of 52.36 acres, making the total park area 1824 acres.

The Barge Canal as finally located passed through the Genesee Valley Park. The Park Commissioners and others feared that the canal would greatly damage the park. The method of construction, however, adopted by the State Engineer, upon the advice of Olmsted Brothers, made the canal with its handsome bridges an asset rather than a detriment to the beauty of the park.

CITY PLANS

The first attempt at a comprehensive city plan was made by the Rochester Civic Improvement Committee of the Chamber of Commerce in 1910-1911. This Committee was composed of sixteen prominent citizens with Charles Mulford Robinson as Secretary. They employed Arnold W. Brunner, architect, Frederick Law Olmsted, landscape architect, and Bion J. Arnold, traction expert. One of the members of that original committee, Mr. Edward G. Miner, is an active member of the present Planning Board.

The report of the Committee consisted of three parts. The main features of the first part were the Civic Center and the Railroad Station Plaza and Approach. While these plans had a great deal of merit, the initial cost was too great for the city at that time, and for this and other reasons the projects were not seriously considered by the city administration.

The second part referred to the street system and it is interesting to note that at that time the question of building lines and setback lines was considered. In urging a plan of major thoroughfares, the Committee said: "Some notes are given below upon many of the specific suggestions embodied in the map, but the main point we want to emphasize is the immense importance that, either upon the lines here suggested, or upon other better lines, the City should adopt a complete and consistent plan of main thoroughfares and see to it that no obstacles thereafter be needlessly permitted to arise which would interfere with the adequate execution of that plan." The plan specified about forty street improvements of which twenty-five have either been completed or included in the present plan.

Mr. Harland Bartholomew, speaking of this Committee in his Report on a Major Street Plan for Rochester, says: "Although this Committee met the usual difficulty encountered by planning committees divorced from the city administration, its existence was more than warranted since it brought to the attention of the citizens of Rochester the necessity of a comprehensive plan."

The necessity for some regulation in the laying out and acceptance of streets led to the adoption by the Common Council



Courtesy Monroe County Regional Planning Board

ROCHESTER'S CENTRAL BUSINESS DISTRICT

The Rochester Subway Railroad with its partially covered section built in the bed of the old Erie Canal may be seen crossing the Genesee River on the old aqueduct in the heart of the city.

in May, 1916, of an ordinance creating a city planning commission, consisting of the Commissioner of Public Works, the City Engineer, and the Corporation Counsel, to prepare a city plan. The Commission, composed entirely of city officials, confined its activities chiefly to the acceptance of streets offered for dedication and to the approval of proposed street extensions, widenings, or openings. While the work of this commission was of much value, the regular duties of the city officials made it impossible for them to give sufficient time to formulate any comprehensive city plan. The responsibilities of this commission ceased when the legislative act creating a Bureau of City Planning was adopted in 1917.

BUREAU OF CITY PLANNING

The next city planning body was a bureau in the Department of Engineering, created by an act of the legislature of 1917. The act provided for a Bureau of City Planning in the Department of Engineering and stipulated that the initiative in all matters should be in the hands of the Superintendent of City Planning, an executive officer of the City who had all the powers of a commission. In order that there should be a continuous policy, his action, however, was not final until approved by the City Planning Advisory Board consisting of four citizens and the Corporation Counsel, *ex officio*. The Mayor, desiring to recognize both the science and the art of city planning, appointed to the Advisory Board members of the Art Commission.

The Bureau had authority to zone the city for use only, and regulations for a comprehensive use zoning system for the entire city were adopted in September, 1919, by the Superintendent and approved by the Advisory Board. During the life of the Bureau additional legislation was enacted providing that "the City may acquire, under condemnation proceedings, any negative easements or amenities, or impose any restrictions in the nature of covenants running with the land on any real estate within or without the limits of the city which it is authorized to acquire." The purpose of this act was to provide setback lines for future street widening.

Another amendment provided for what is known as excess condemnation and permitted the city to take more land and property than is needed for actual construction in laying out, widening, extending, or relocating parks, public places, highways, or streets, provided, however, that the additional land and property so taken shall be no more than sufficient to form suitable building sites abutting on such park, public place, or street.

Another amendment gave the Council authority to zone for height and bulk of buildings subject to the approval of the Superintendent. The Council never availed itself of this amendment.

While it was unnecessary for the Council to adopt or approve regulations of the Bureau, the Council was sympathetic with the work of the Bureau and provided necessary appropriations to carry on the work. The writer was the first Superintendent of the Bureau, and served as such in addition to serving as Consulting Engineer to the City until January 1, 1924.

Mr. Bartholomew, in his report on the Major Street Plan, says with reference to city planning:

During the past nine years there have been 84 street opening and widening projects, involving a total cost of \$2,366,854.82. . . . Approximately twelve miles (66,930 feet) of street widening were undertaken at a cost of \$1,112,770.78, and a similar amount (66,687 feet) of street openings were completed at a cost of \$1,254,084.04. . . .

The work which has been done constitutes an impressive list of projects. It shows a more substantial accomplishment than most other cities and is exceeded only by the accomplishments of such cities as Chicago, St. Louis, Memphis and others which have undertaken very much larger programs based upon definitely adopted comprehensive plans.

POLICY OF THE BUREAU

The Superintendent's report of the City Planning Bureau from 1918 to 1922, edited by Mr. Edward Hungerford, states that the general policy of the Superintendent of City Planning, concurred in by the Advisory Board, has been, first, to prepare a general comprehensive plan of such street changes and additions as might be required primarily to make the city's main thorough-

fares equal to the demands to be put upon them, and second, to present to the Common Council for immediate action only such portions of the plan as in the judgment of the Superintendent and the Board could be carried out without long delay.

The Advisory Board had authority to hold public hearings upon matters coming before it. It also had the power to make such changes and exceptions in the zoning regulations as were necessary. It acted substantially as a Board of Appeals.

The work of the Bureau during the ten years of its existence may be briefly summarized as follows:

1. Preparation of a general city plan.
2. Adoption of zoning regulations, regulations for the approval of subdivision plans, regulations for acceptance of streets offered for dedication, and approval of street openings.
3. Approval of 1674 subdivisions, 685 street openings or changes in streets, 440 changes of zones, 927 exceptions in zoning regulations, 256 gasoline filling stations in commercial and residence districts.

A large number of applications for changes of zone and for exceptions were considered in the office of the Superintendent of City Planning and either withdrawn by the applicant or denied by the Superintendent.

The Board also held many public hearings upon applications for approval of plans for street openings, widenings, etc. The decisions of the Board in all cases met with the approval of the Superintendent and no appeal from any decision was made to the Mayor as provided for in the Act. The Bureau recommended the location of a civic center over and adjacent to the Genesee River, bounded by Main Street on the north, South Avenue on the east, Court Street on the south, and Exchange Street on the west.

While the Bureau met with some measure of success here in Rochester, the method is not adaptable for general use nor for a City Manager type of government. The writer has never recommended it for other cities. It makes no provision for an official map nor for a board of appeals.

NEW LEGISLATION AND CHANGES IN ADMINISTRATIVE BODIES

The General City Law was amended in 1926 by the addition of Article 3 which clearly and effectively sets forth the manner in which an official city street plan may be adopted, enforced, and amended from time to time as changing conditions may warrant. The Act, while providing, for the purpose of preserving the integrity of such official map or plan, that no permit should thereafter be issued for any building in the bed of any street or highway shown or laid out on such map or plan, also provided for relief in special cases by an appeal to the Board of Appeals, which Board was given definite authority to make reasonable exceptions.

The present City Manager Charter became effective January 1, 1928. It provided for a council of nine members, five elected at large and four representing the four districts into which the city was divided. The Charter also created a City Manager as the chief administrative officer of the City. He is to be selected by the Council and may be suspended or removed at the pleasure of the Council. The Charter provided a city planning commission to replace the City Planning Bureau, the Commission to consist of five members, with the Director of Design and Construction (City Engineer) as the Chief Engineer, and a secretary who is required to be an engineer with at least five years' experience.

The duty of the Commission was to prepare a city plan and to hire necessary assistance, keeping all expenditures within an amount appropriated by the Council.

A new zoning board, separate from the City Planning Commission, was appointed in January, 1929. The Zoning Advisory Board interpreted the old zoning regulations and also prepared, approved, and recommended a new ordinance which included use, height, and area regulations. The ordinance was adopted by the Council on January 10, 1929. The Zoning Advisory Board had the advice of Mr. Edward M. Bassett and of Corporation Counsel Clarence M. Platt in the preparation of comprehensive zoning regulations. In 1929 the General City Planning Law was amended by providing that the Planning Commission be replaced by a planning board of five members, two of whom should be city

officials. The new Planning Board was appointed on July 2, 1929, in accordance with this law. Since the adoption of the new zoning ordinance a board of appeals, also consisting of five members, was appointed on July 9, 1929. The Board has specific power, as designated in the zoning ordinance, to hear appeals from certain decisions of the Planning Board as defined in the General City Law, Article 3, of the State of New York. The Board may also in specific cases vary the application of the zoning regulations.

BARTHOLOMEW PLAN

On May 27, 1929, with the approval of the City Council a contract was made with Harland Bartholomew and Associates by the City Manager for a comprehensive city plan to cover the following specific studies:

- | | |
|---|-------------------------------|
| 1. Major Street Plan | 5. Public Recreation |
| 2. Civic Center Plan | 6. Zoning Plan |
| 3. Transportation and Harbor
Facilities Report | 7. Civic Art |
| 4. Transit Plan | 8. A Final Comprehensive Plan |

The first part, the Major Street Plan, has been published and will be available to members of the Conference at its session in this city. This study is the main feature of the city plan. It lists 26.03 miles of major streets of sufficient width, 108 miles of major streets to be widened, and 12.97 miles of new openings and extensions, citing 145.27 miles as the total length of the major street system in the comprehensive plan.

The Bartholomew organization has also completed a comprehensive plan for a civic center. The Consultants studied all available sites in or near the central traffic district and finally gave preference to the river site between Court Street and Main Street. It is interesting to note that while the actual arrangement of the suggested buildings is different, the site is the same as was recommended by the former City Planning Bureau in December, 1927.



Courtesy Monroe County Regional Planning Board

GENESEE RIVER NORTH OF THE LOWER FALLS

This portion of the river flows through a deep gorge with heavily wooded banks. The Ridge Road Bridge, now under construction, may be seen in the lower center.

OFFICIAL BOARDS CONNECTED WITH THE CITY PLAN

The City Planning Commission is now made up of a chairman who is a prominent architect, a business man connected with large business interests and former member of the Rochester Civic Improvement Committee of 1911, another business man of large interests, the Director of Design and Construction (City Engineer), the Corporation Counsel, the Secretary, and the Superintendent of City Surveys who was connected with the former Bureau as Deputy Superintendent and for part of the time as Superintendent.

The Board of Appeals has definite functions which are in the nature of a court. It is very fortunate that no member of this Board is connected in any way with any other department of the city government. The Chairman who is a prominent builder, two well-known architects, a real estate operator, and a business man connected with one of the large business institutions of the city, now make up the personnel of the Board. The writer has stated in a public address that this Board is as far removed from any political or personal considerations as the Court of Appeals of the State of New York.

MONROE COUNTY REGIONAL PLANNING BOARD

The official boards of the county and of the surrounding towns have been of great assistance, and will in the future be of more assistance in putting the city plan into operation. Special mention should be made of the efficient and comprehensive work of the Monroe County Regional Planning Board. During the year 1930 it contracted for an aerial map, and developed an agreement with the United States Geological Survey for a resurvey of the county and for the publication of new topographic maps. Through arrangements between the federal, state, and city governments, Monroe County will have accurate, up-to-date maps for the use of the Planning Board. Copies of these maps will be available to other boards and to individuals.

The Chamber of Commerce, the Bureau of Municipal Research, the Rochester Civic Improvement Association, Colonel

Carey H. Brown, Executive Secretary of the Business District Association, Harry B. Bloss, Executive Secretary of the West Side Improvement Association, the Rochester Engineering Society, the Real Estate Board, and numerous other associations in various parts of the city have given their aid. The work has at all times had the active and influential support of the entire press of the city. All of these associations have been of great value in helping to shape proper legislation, and their continued coöperation will be absolutely essential to the successful operation of the city plan.

The official and unofficial bodies unite with the entire community in extending a hearty welcome to the National Conference on City Planning at its meeting here in June of this year.

In the last half a century we have herded fifty million more human beings into towns and cities where the whole setting is new to the race. We have created highly congested areas with a thousand changes resulting in the swift transition from a rural and agrarian people to an urban, industrial nation.

Perhaps the widest range of difficulties with which we are dealing in the betterment of children grows out of this crowding into cities. Problems of sanitation and public health loom in every direction. Delinquency increases with congestion. Overcrowding produces disease.

Some of the natural advantages of the country child must somehow be given back to the city child—more space in which to play, contact with nature and natural processes. Of these the thoughtless city cheats its children. Architectural wizardry and artistic skill are transforming our cities into wonderlands of beauty, but we must also preserve in them for our children the yet more beautiful art of living.—President Hoover *in address at the opening session of the White House Conference on Child Health and Protection.*

TRENDS IN PRESENT-DAY CITY PLANNING IN THE UNITED STATES

By HAROLD S. BUTTENHEIM

Editor, *The American City*

THE opening month of the century's fourth decade was signalized by an interesting event, an exclusive story of which, received by interstellar television, has enabled a busy editor to serve as a mere reporter in preparing the present article. The event was nothing less than the publication of the first report of the Celestial Regions Planning Commission. The Commission, it transpires, was formed a few months ago under the chairmanship of a certain political philosopher named Plato. In deference to the conservative ideas of the long-time residents who hold the balance of power, membership in the official planning body was restricted to ten elder statesmen for most of whom citizenship in those ethereal lands antedates the present century. But an Advisory Committee of an equal number of newcomers was appointed to collaborate with the elders in preparing the American section of the report. Of these collaborators eleven are recent residents of the United States, and one hails from England.

The personnel of the official Planning Commission and of the Advisory Committee gives assurance of a challenging combination of the imaginative and the practical. Here are the names of the twenty members and the dates of taking up their citizenship in the Celestial Regions:

PLANNING COMMISSION

PLATO (347 B. C.)
ST. JOHN (c. 97 A. D.)
SIR THOMAS MORE (1535)
SIR CHRISTOPHER WREN (1723)
MAJOR PIERRE CHARLES L'ENFANT (1825)
BARON GEORGES EUGÈNE HAUSSMANN (1891)
FREDERICK LAW OLMTED, Sr. (1903)
CAMILLO SITTE (1903)
DANIEL H. BURNHAM, Sr. (1912)
JACOB A. RIIS (1914)

ADVISORY COMMITTEE

HENRY GEORGE (1916)
REINHARD BAUMEISTER (1917)
CHARLES MULFORD ROBINSON (1917)
GEORGE E. KESSLER (1923)
CHARLES D. NORTON (1923)
NELSON P. LEWIS (1924)
ARNOLD W. BRUNNER (1925)
CHARLES W. ELIOT (1926)
SIR EBENEZER HOWARD (1928)
GEORGE B. FORD (1930)

Both groups, as should be the case in any planning body, include specialists in the principal subdivisions of the Commission's field of work,—specialists whose vision is broad enough to see beyond the confines of their own primary interests. Preliminary to its task of preparing a master plan for the Celestial Regions, the Commission has been wise enough to study the experience and tendencies in other lands. Such a study of Trends in Present-Day City Planning in the United States comprises the report I now have the privilege of transmitting to you. It follows in full text:

When your Chairman (says the report) wrote "The Republic," he little thought that some day he would be helping to plan a new city-state in which slavery would not exist and in which workingmen would not be excluded from the political life of the community. Nor did he anticipate that his carefully thought-out system of communism would be so universally rejected by thinking men in a land then unknown to him. On the other hand, he little dreamed

that his advocacy of universal education—which he intended to restrict, of course, to the governing classes—would be extended to every child, though he grieves to state that even America has not yet gone far in acting on his plea that education for life continue throughout life. Nevertheless, he finds that his ideas have been fruitful in many respects. He knows, too, that the same may be said of the ideas set forth during the earthly life of every member of the Celestial Regions Planning Commission and of its Advisory Committee. For this reason, the present report attempts to evaluate present-day trends in city planning in the United States in the light of developments which have been in accord with, or have progressed further than, the recommendations made by the members of the two coöperating groups during their sojourn on Earth.

It would not be amiss to note, first, the tremendous spread of planning throughout the country,—how it, like the State, “if once started well moves with accumulating force like a wheel.”¹ James S. Taylor, Chief of the Division of Building and Housing of the United States Department of Commerce, states that according to the records of his Division (as of January 10, 1931) there are now in the United States:

- 716 city, town, and village planning commissions
- 67 regional planning commissions or organizations, both official and unofficial
- 36 official county planning commissions
- 35 states which have used the Standard State Zoning Enabling Act (in 54 different acts)
- 8 states which have used the Standard City Planning Enabling Act (in 11 different acts)
- 920 zoned municipalities in the United States (including 88 of the 99 cities having over 100,000 population in 1930)

The acceptance of city planning and zoning by local authorities, civic organizations, and leading citizens in the United States is increasingly motivated by their concern for the general welfare, and not merely by a desire to promote the wealth or esthetic enjoyment of the few. Your Chairman is glad to recognize the great progress which the human race has made since he wrote “The Republic” some 2300 years ago. It will be recalled that he then put into the mouth of Socrates the words, “For indeed any city, however small, is in fact divided into two, one the city of the poor, the other of the rich; these are at war with one another. . . .”² This conflict of interests has by no means disappeared from the Earth, but more and more are city and regional planning becoming the instruments through which is being fashioned “the happy state, not piecemeal or with a view to making a few citizens happy, but for the whole.”²

The New Jerusalem, the city lying foursquare with its streets of gold, its pearly gates, its river clear as crystal, with trees of life on either bank, was

¹Plato’s “Republic,” Book IV.

²*Ibid.* Book IV.

envisioned by the honorable fellow member of this Commission, St. John of Patmos, as a better place designed specifically for the worthy who had suffered the injustices of the world in which they lived. But, desirable as this eternal home may be, it is heartening to know that the inhabitants of the earthly realms are organizing themselves with increasing efficiency to control their environment and to build communities which shall provide for the health, comfort, convenience, and leisure-time enjoyment of all. In the United States of America, the land to which our present studies especially relate, the realization has become quite general among leaders of thought that technical knowledge and material resources now exist for building finer cities than the world has ever known, and that this new perfection of environment may be established as completely and as promptly as the citizens have the good sense to unite in the coöperative efforts without which this perfection cannot be achieved.

TOWARD A SCIENCE OF PLANNING PRACTICE

It is not strange, therefore, that one of the chiefly discernible present trends in planning progress in the United States is toward a science of planning practice. A body of procedure embracing legal, administrative, technical, and civic activities, unified in workable programs for accomplishment, has become a generally recognized need among the scattered thousands throughout the cities, towns, and villages of the United States who want to work for the better day, but lack authoritative and expert guidance.

The Planning Foundation of America was organized with high hopes some two years ago in an attempt to meet this need. As yet that body has not won the support in finance and man-power essential for its success but the need is so evident as to strengthen belief that its realization will not be long delayed. Meanwhile, active workers in the profession, members of the American City Planning Institute and other professional societies, the institutions of higher education, and other agencies, are doing fine work in developing established techniques for planning; specialists in the legal profession are working to better the status of planning in the courts and as a phase of governmental administration; and national and state bodies devoted to the betterment of municipal and civic affairs are sponsoring a high level of endeavor on the part of responsible citizenship and local government. The National Conference on City Planning, adhering to the ideals of its earlier years and of the men who formed it (some of whom are now functioning on our Celestial Commission), constantly reflects the broadened scope of planning in its program and activities. A new technique for preliminary surveys is coming into use. The master plan can now be reinforced in some states by adoption of an official map. Experiments are being made for capital budgets to be used in the carrying out of plans.

THE REGION AS A UNIT

One of the most definitely observable trends in planning in the United States is toward the acceptance of the region as the unit for a master plan which includes highway, parkway and transportation systems, open areas, and other intercommunity needs. The purpose is well enunciated in the Standard City Planning Enabling Act developed by the United States Department of Commerce, as that of guiding and accomplishing coördinated, adjusted, harmonious development of the region, and of public improvements and utilities that do not begin and terminate within the boundaries of any single municipality.

There appear to be three main reasons for the remarkable growth of the regional planning movement: (1) the fact that the great cities and their environs realize their interdependence and the absurdity of treating political boundaries as planning boundaries; (2) a growing desire for spaciousness in community development, and greatly increased ability, through rigid roads and resilient tires, to render congestion unnecessary; and (3) the trend toward decentralization and suburban development.

The suburban trend during the last ten years can be appraised with greater accuracy than at present, when the Bureau of the Census has completed its tabulations for metropolitan regions throughout the United States. Meanwhile, the Regional Plan Association of New York has compiled from the census reports some significant figures for the New York region which it is serving. These figures show a much larger percentage of increase for the environs of New York than for the city of New York during the last decade. Here are the figures:

	1920	1930	Percentage of increase
New York City	5,620,048	6,930,446	23.3
Environs	3,359,007	4,515,271	34.4
Total for Region	8,979,055	11,445,717	27.5

Even more significant are the figures for the Cleveland region as disclosed by a comparison of the growth of that city and of the rest of Cuyahoga County:

	1920	1930	Percentage of increase
Cleveland	796,841	900,429	13.0
Rest of Cuyahoga County	146,654	301,026	105.3
Total for Cuyahoga County	943,495	1,201,455	27.3

For Metropolitan Boston a tabulation made by the Boston Chamber of Commerce shows the following comparison:

	1920	1930	Percentage of increase
Boston	748,060	781,188	4.4
42 Additional Cities and Towns	935,814	1,173,980	25.5
Total for Region	1,683,874	1,955,168	16.1

It will be remembered that in discussing the type of city-state advocated in "The Republic" the question was asked, "And what will be the best limit for our rulers to fix when they are considering the size of the state and the amount of territory which they are to include and beyond which they will not go? . . ." The answer given was: "I would allow the State to increase so far as is consistent with unity; that, I think, is the proper limit. . . . Let our city be accounted neither large nor small, but one and self-sufficing."¹

A present-day answer to this question of the boundaries of development for the ideal city is couched in terms of a prophecy. It is quoted from "Our Cities To-day and To-morrow," a book which is, or ought to be, well known to the readers of CITY PLANNING.

"We venture to predict, however, that its size will be consciously proportionate to the size and character of the tributary region and to the efficient size of residential neighborhoods; that enough land will be open within and around it to prevent the merging of neighborhoods in an amorphous and soulless urban mass."

Contemporaneously with the increased study of regional *planning* by the planning profession, there is an unmistakable trend in the United States toward a study of the problems of regional *government* by political scientists. The last two years have witnessed the careful preparation of charters for a Greater Pittsburgh and a Greater St. Louis, both of which have failed of adoption at the polls, but which seem likely to secure popular approval—perhaps in an amended form—during the present decade. A Greater Atlanta was created by the Georgia Legislature of 1929, with a form of government so unique that there has arisen a controversy as to whether the Bureau of the Census can be forced to list Greater Atlanta as a *city* for enumeration purposes. Other moves toward regional government are a proposal, defeated in 1930 and to be reintroduced in amended form this year in the New Jersey Legislature, under which a new form of regional control would be inaugurated in great districts of that state; a proposal to be submitted to the Great and General Court of Massachusetts this year by a Committee headed by Professor Joseph H. Beale of the Harvard Law School, which, it is understood, will provide for the creation of a Metropolitan Boston, organized on the lines of the Administrative County of London; and a proposed amendment to the Ohio Constitution which would enable the Legislature to deal with the question of county reorganization by the adoption of model county government acts, as well as permit in Cuyahoga County the establishment of a Greater City of Cleveland, retaining the existing units as elements in the scheme.

¹*Ibid.* Book IV.

HIGHWAYS FOR THE MOTOR AGE

A new trend—perhaps the most outstanding new trend in planning—is an elaboration of a basic principle enunciated more than twenty years ago by Frederick Law Olmsted, the able son of one of the most respected advisers of our Celestial Regions Planning Commission:

“Facility of communication is the very basis for the existence of cities; improved methods of general transportation are at the root of the modern phenomenon of rapid city growth; and the success of a city is more dependent upon good means of circulation than upon any other physical factor under its control.”¹

And nearly sixteen years ago a member of our Advisory Committee, Charles Mulford Robinson, said:

“The whole problem of street adjustment has thus become immensely enlarged and complicated. It is no longer sufficient simply to widen streets and untangle their old network; nor, on the other hand, is it enough, in the extension of cities, to plat simply a regular system of traffic canals, long, straight, and monotonous, all alike in dimensions and character. We must form main traffic channels that in location and arrangement shall be so nearly ideal that traffic will naturally concentrate upon them, to the end that the streets which we do not design for traffic highways shall not be unduly used for traffic.”²

This prediction is being realized in the intensive study which highway departments, city planners, and traffic engineers are giving to the design of highways and of their intersections to meet the needs of the motor age. The fact that the last meeting of the American City Planning Institute was devoted to this subject indicates the significance of the trend. The world-wide acclaim that has greeted the parkway developments in Westchester County, New York, and the almost equal interest shown in the street plan of Radburn, New Jersey, are other indications of this trend, as is also the fact that the United States Department of the Interior, in issuing a newspaper release on its plans for Boulder City, announced: “No automobile will ever park at the curb in this town.”

In passing it may be of interest to note that perhaps the earliest example of a town plan now known to the denizens of the Earth is the ruins of the small town of Kahun in Egypt, “laid out in regular blocks to house the builders of one of the pyramids more than 2500 years B. C.”³ It is not stated in the history books that automobiles did not park at the curb in this town either,—but such is believed to be the case.

The trend away from buggy thinking in the present motor age is further observable in the policies of state highway departments in the building of

¹*The American City*, Aug. 1910.

²“City Planning, with Special Reference to the Planning of Street and Lots” (Robinson).

³“Towns and Town Planning, Ancient and Modern” (Hughes and Lamborn).

by-pass routes around towns and villages for through traffic. Its promise of adaptation to whole regions as a basis for still finer planning of undeveloped areas than we have yet seen, is embodied in the idea of "townless highways," as recently sponsored by Benton MacKaye, and simultaneously by one of the most authoritative planners of Great Britain, Raymond Unwin, who has incorporated it into recommendations made in official plan studies for the London Region.

This question of planning for segregated traffic and for ease of communication in the city and region is not dissociated from other fundamental matters of planning, such as the housing of workers within reasonable accessibility to their work, new planned neighborhood units and suburban communities, comprehensive zoning and platting regulations. With the science of planning for traffic and transportation enabling the worker to move from congested districts to outlying sections, the opportunity has arisen to make good the old mistakes of room and lot overcrowding, lack of public open areas, and the unbalanced disposition of land between public and private and between industrial and domestic uses.

THE PLANNING OF NEW TOWNS

Some of the Commission believe that the finest flower of city planning in the United States is to be seen to-day in certain of the newly planned towns such as Kingsport, Longview, Mariemont, Palos Verdes, and especially Radburn; and in residential and highly distinctive suburbs of older cities where control of the amenities may be carried (by voluntary agreement enforced through restrictions in deeds) to a point not yet realized in America as justifiable public policy. These, and neighborhood unit developments, may be expected to function as experimental laboratories where planning formulas can be proved to the definite advantage of older and larger entities. It was another of our Advisory Board members, Sir Ebenezer Howard, who gave the most effective impulse to the development of garden cities. Though two underlying principles of the garden city idea—public ownership of the land and the permanent reservation of a "green girdle" around the city—have not yet been adopted in the United States, Sir Ebenezer's ideals are believed to be increasingly realizable in new towns. Performance, however, still lags so far behind the vision as expressed in "Garden Cities of Tomorrow" that some of its paragraphs are well worth quoting.

"I will undertake, then, to show how in 'Town-country' (as Mr. Howard called his ideal community) equal, nay better, opportunities of social intercourse may be enjoyed than are enjoyed in any crowded city, while yet the beauties of nature may encompass and enfold each dweller therein; how higher wages are compatible with reduced rents and rates; how abundant opportunities for employment and bright prospects for advancement may be secured for all; how capital may be attracted and wealth created; how the most admirable sanitary conditions may be ensured; how beautiful homes

and gardens may be seen on every hand; how the bounds of freedom may be widened, and yet all the best results of concert and coöperation gathered in by a happy people. The construction of such a magnet, could it be effected, followed, as it would be, by the construction of many more, would certainly afford a solution of the burning question . . . 'how to back the tide of migration of the people into the towns and get them back upon the land.'

"Its object is, in short, to raise the standard of health and comfort of all true workers of whatever grade—the means by which these objects are to be achieved being a healthy, natural, and economic combination of town and country life."

The results of garden city development are ultimately to manifest themselves in the disappearance of all slums in cities, and in sunlight, fresh air, and breathing spaces proportionate to the requirements of the residents. This Ebenezer Howard promises:

"Slum property will sink to zero, and the whole working population will move into houses of a class quite above those which they can now afford to occupy. Families which are now compelled to huddle together in one room will be able to rent five or six, and thus will the housing problem temporarily solve itself But what will become of this slum property? . . . will it yet remain an eyesore and a blot, though no longer a danger to health and an outrage on decency? No. These wretched slums will be pulled down, and their sites occupied by parks, recreation grounds, and allotment gardens."¹

In the planning of new communities and of new subdivisions in existing cities, the value of the cul-de-sac as a street pattern is being more and more realized. In the report of the Sub-Committee on Housing Standards submitted in Washington in November, 1930, to the White House Conference on Child Health and Protection, it is stated that "the preferable location for a home is on a minor street so planned as not to be inviting to through traffic."

The traditional prejudice against closed-end streets has resulted in the too frequent requirement by municipal officials that every street be planned as a through street. It is to be hoped, however, that the sanity of the cul-de-sac as demonstrated in increasingly numerous examples in Europe and America, will result in actual encouragement of this type of planning by the city fathers.

In a short article published in the February number of *The American City*, Edward T. Hartman, Consultant to Planning Boards of the Commonwealth of Massachusetts, advocates what he calls a glorified cul-de-sac. This is a new type of protected residential area, which may be entered from but one point, or possibly two or three points, and whose street system invites no traffic whatever except that serving the area itself. If Benton MacKaye's "townless highway" idea is a rational one,—as a growing body of opinion believes it to be,—is there not good reason for this corollary of what might be termed "highwayless towns" so far as through traffic is concerned?

¹"Garden Cities of Tomorrow" (Howard).

MAKING OLD CITIES MORE LIVABLE

Arnold W. Brunner said early in his earthly career: "Our problem in America to-day is not to design new cities but to replace and remodel old ones." Activities in city redesign are apparent to-day on an unprecedented scale in St. Louis, in Chicago, in Washington, in Cleveland, in Dallas, and elsewhere. Some of these projects have been under way over terms of years and are now arriving at the point of showing great results. Others, on a somewhat less comprehensive scale, have been but recently undertaken and are being carried through with expedition. Street improvement for traffic relief has been the chief motivation for such physical reforms; but they have been made the opportunity for epochal achievements in the redesign of public building groups, the clearance of slum sections, the opening of new parks and play areas, the redesign of whole waterfront sections, and the adoption of better zoning regulations in the matter of building height and density and—still in a limited way—in the control of building design.

The high ideal of civic center development voiced by Mr. Brunner is here quoted:

"In the turmoil of city life the clash of commercial interests, the fierce competition, the struggle for supremacy, have made our business streets ugly and chaotic.

"Buildings quarrel with each other, each trying to overtop and outdo its neighbor. To be more conspicuous is thought to be more successful. Our streets become crowded to the point of danger and intersections of important thoroughfares become centers of congestion.

"Many of our cities suggest some of the cubist or post-impressionist—or super-impressionist—pictures that one sees, an extra number of arms and legs but no recognizable head. So we find miles of streets extending in all directions but with no distinctive features or evidence of individuality.

"The Civic Centre is where the city speaks to us, where it asserts itself. Here the streets meet and agree to submit to regulation. They resolve themselves into some regular form, the buildings stop swearing at each other, competition is forgotten, individuals are no longer rivals—they are all citizens.

"Petty struggles for prominence, small successes and failures disappear. Here the citizens assume their rights and duties and here civic pride is born."¹

This civic center ideal is being realized in actual construction work in a few larger cities—St. Louis, Denver, Cleveland, Los Angeles, San Francisco, and the super-civic center in Washington, for example—and is being worked toward in numerous others, while appreciable accomplishments are evident in this field in many cities of lesser size. The acquisition of ground for the civic center and its boundary streets, in practically all the large city under-

¹Proceedings of the Eighth National Conference on City Planning, 1916.

takings (as well as in the Fairmount Parkway development in Philadelphia), has been the occasion of large-scale slum clearance undertakings, and the reconditioning or wiping out of "blighted areas."

PARKS AND PLAYGROUNDS

Two distinctive trends in present-day park development are toward the small area within easy reach of every resident and the great open areas away from the center. The principles under which these developments are being worked out were thus voiced by the elder Olmsted in a paper before the American Social Science Association in 1880:

"... the problem of a park ... under the view which I had aimed to suggest ... is mainly the reconciliation of adequate beauty of nature in scenery with adequate means in artificial constructions [for] protecting the conditions of such beauty, and [for] holding it available to the use, in a convenient and orderly way, for those needing it; and the employment of such means for both purposes as will make the park steadily gainful of that quality of beauty which comes with age.

"That other objects than the cultivation of beauty of natural scenery may be associated with it economically, in a park, I am not disposed to deny; but that all such other objects should be held strictly subordinate to that, in order to justify the purchase and holding of these large properties ... cannot be successfully disputed."¹

George E. Kessler voiced, in his Dallas report in 1911, the impossibility of establishing standards for general adoption,—a matter still not always accepted by planners and recreation experts:

"It is necessary in the distribution of park lands to bear in mind that if the majority of people are to have the full benefit of outdoor recreation, parks and playgrounds must be provided within easy walking distance of their homes. It would be difficult to determine the necessary extent of such lands, that being a question to be governed by the density of population in the different sections. Since large parks in a city must be limited in number and since they are often not so located as to be of the greatest usefulness to the general public, the connecting parkways between these properties can, by careful planning, be made to serve the purposes of local parks without in any way interfering with their primary purposes."

SLUM CLEARANCE

Another trend of thought—though marked as yet by little accomplishment except as incidental to other projects—is the rehabilitation of the blighted areas of American cities. One of the most practicable legal means of action in the United States is through such major projects of boulevard

¹"Forty Years of Landscape Architecture," Vol. II (Olmsted and Kimball).

building as were carried out in Paris through the efforts of our fellow member, Baron Haussmann, and by which England would so greatly have benefited had it acted on the plans of another member, Sir Christopher Wren, when after the great fire of 1666 he urged the reconstruction of London on a plan which would have cleared many of its slums and have made the city one of the most beautiful in the world.

There is a distinct trend in thought among city planners, however, that the betterment of housing conditions must become a major purpose, rather than an incidental benefit, of city planning projects. This interrelationship of housing and city planning has been emphasized in numerous national, state, and local meetings of planning and housing organizations during the last two years. The next step will be, it is hoped, the completion of studies for actual projects of slum clearance and the enlistment of the business and financial leadership essential to effective action. As the Editor of *The American City* said to the Philadelphia Housing Association last March:

"We need much more careful studies in our American cities, than have yet been made, of the extent to which our blighted districts are being unwittingly subsidized, on the one hand, and their property owners penalized, on the other hand, by municipal neglect. And we need to know much more accurately than at present, not only the economic values attendant on the replanning of blighted areas, but the uneconomic values attendant on our failure to do such replanning."

Much is to be hoped from the concentration of public thought on housing problems sure to result from the White House Conference on Home Building and Home Ownership for which President Hoover has recently appointed an organizing committee. A great need is that there shall arise in America new leaders who shall have the ability to write and speak on the evils of bad housing as did Jacob A. Riis, of our Advisory Board, and to enlist funds and organizing ability as did Charles D. Norton in Chicago and New York.

THE PRESERVATION AND CREATION OF BEAUTY

When the preliminary plans for the 1930 National Conference on City Planning were under discussion, the late George B. Ford suggested as the subject for one of the papers, "The City Beautiful—Are We Still Afraid of It?" This was in recognition, of course, of the reversal of a trend which has marked the city planning movement in America during the last two decades. The early emphasis was perhaps too strongly in the direction of beauty at the expense of utility, or of mere adornment, which caused Mr. Brunner to coin his oft-quoted phrase that "the city beautiful means something more than tying pink bows on lamp posts."

But emphasis swung so strongly toward the utilitarian as to result in the good English word "amenity" being hardly known except among a few of the élite in the city planning movement in America. The return to a better

balance of thought is evident, however, and there seems to be some hope that an outstanding trend in American planning during the decade just beginning will be the preservation and creation of beauty through public expenditures in city and region and the legalizing of effective architectural control over structures on private land in public view. The most significant forward step in this direction in the United States is the adoption by Congress in 1930 of the Shipstead Act, establishing architectural control over plans for all new private buildings facing public building groups in the District of Columbia and requiring their approval by the National Commission of Fine Arts. It is a great source of satisfaction to our fellow member, Major L'Enfant, that the city of Washington has developed so magnificently in line with his plans, and he rejoices at the further steps now being taken under the leadership of the National Capital Park and Planning Commission, on the staff of which he is glad to find the able grandson of another of our Commission members, Charles W. Eliot.

ARCHITECTURAL CONTROL

Emphasizing the need of architectural control for cities generally, Charles H. Cheney, Chairman of the Committee on City and Regional Planning of the American Institute of Architects, says in his review of "Progress of City and Regional Planning in 1930":

"We are still getting nearly 90 per cent in number of buildings (almost everywhere in the country) so ugly and off color, so badly arranged and inappropriately placed on account of bad street planning, lack of proper zoning, etc., that they form a liability instead of an asset, almost from the day that they are completed. This, the most serious and probably greatest economic loss of our time, should be the first problem to solve in the coming decade.

" 'Without benefit of clergy,' as the old saying goes, or rather without the help of a trained architect or any other competent designer, these buildings have been put up (and are continuing to be put up) by the careless and thoughtless of the country. And the worst of it is that the much greater blight and loss must be suffered willy-nilly, by owners of property unfortunate enough to be in the immediate neighborhood into which these bad buildings intrude themselves.

"That is why architectural control is becoming such an important question in the country. A careful check-up of the plans of all buildings to see that they maintain 'reasonable decency of design' and appropriateness to their surroundings, would in a few years reverse these very unfavorable percentages."

The gridiron seems gradually to be losing its prestige as a city planning pattern in America. There will be little regret among lovers of the picturesque if the planning ideas of William Penn are replaced by those of Camillo Sitte. As Lanchester well says in his chapter on "Romanticism" in "The Art of

Town Planning," "He [Sitte] only accepts the formal within limited areas, and exhibits a distinct preference for a picturesque irregularity in general treatment, pointing out, with justice, that the mind derives little interest from anything which can be appreciated at a glance, such as a straight and uniform street, or an unvarying façade, and deducing from this that geometrical planning should give way to a deliberate effort to recapture by design the accidental qualities of medieval towns. . . ."

The influence of a world's fair, if planned in the grand manner and with imaginative thought for detail, has long been recognized. To our member, Daniel H. Burnham, is given much credit for having exerted, through the Chicago Fair of 1893, a profound influence for good on the city planning movement. The fact that to his son of the same name much responsibility for the Chicago World's Fair of 1933 has been assigned, promises much for the part which that great exposition may play in crystallizing and visualizing some of the trends in present-day city planning set forth in this report.

ZONING

To Germany belongs the credit for having been the leader, prior to the last two decades, in the use of zoning as a means of controlling the kind and intensity of land uses. Writing of density and open spaces in urban developments, our fellow member Nelson P. Lewis said in 1916: "The greatest number of cities for which such regulations have been adopted are in Germany, and they are there found to be more complex and varied than in any other country. They are applied in connection with the zoning system so generally adopted by German cities and which was first advocated by Baumeister in the seventies, but was not actually put in force anywhere until 1884 in Altona, when the famous Dr. Franz Adickes was Mayor. In 1891 Adickes, who had become the chief executive of Frankfort-on-the-Main, introduced it there, and it was soon taken up by the German and Scandinavian cities."¹

America, in this case, as in many others, has looked to Germany for teaching, and has developed the ideas thus acquired to an extent not anticipated by the originators of them. In the United States, however, zoning legislation has proceeded somewhat haltingly because of a wholesome respect for constitutional restrictions and the powers of the courts. With the fundamental idea now firmly established and blessed by even the United States Supreme Court, two trends which may be expected to gain headway during the present decade are (1) more effective restrictions against land overcrowding and (2) the gradual removal of nonconforming uses which had acquired a foothold prior to the enactment or enforcement of zoning ordinances.

BALANCING COSTS AND BENEFITS

In your Chairman's life on Earth he believed in absolute control *by the state* of private property and domestic life, education and instruction, the

¹"The Planning of the Modern City" (Lewis).

choice of rank, and the direction of the arts and sciences. Another member of our Commission, Sir Thomas More, planned a Utopia where there would be complete detachment from all preoccupation over "mine and thine." He said:

"In all other places it is visible, that while people talk of a commonwealth, every man seeks his own wealth; but there, where no man has any property, all men zealously pursue the good of the public: and, indeed, it is no wonder to see men act so differently; for in other commonwealths, every man knows that unless he provides for himself, how flourishing soever the commonwealth may be, he must die of hunger; so that he sees the necessity of preferring his own concerns to the public; but in Utopia, where every man has a right to everything, they all know that if care is taken to keep the public stores full, no private man can want anything; for among them there is no unequal distribution, so that no man is poor, none in necessity; and though no man has anything, yet they are all rich; for what can make a man so rich as to lead a serene and cheerful life, free from anxieties; neither apprehending want himself, nor vexed with the endless complaints of his wife?"¹

These ideas have been rejected by mankind with such approach to unanimity that their validity may well be doubted; but there is an unmistakable desire among leading political economists and city planners in America to discover methods of retaining the advantages of private ownership of land while preventing the economic injustice and the handicaps to the carrying-out of city plans and of large-scale, low-cost housing enterprises which present practices generally entail. Various devices are being tried with varying degrees of success. These include special assessments on benefited property, excess condemnation, and more scientific methods of real estate valuation. They are all excellent as far as they go. A canvass of our Commission and of its Advisory Committee discloses an interesting change in our economic ideas since becoming residents of these Celestial Regions. In brief, we have become convinced that our fellow member, Henry George, was essentially sound when he advocated the financing of city planning projects and of local government generally, by the funds which such activities automatically create. If the increased land values which are now produced by the community as a whole were recaptured by the community through a rational method of site-value taxation, and if by the same means all taxation were removed from improvements, there would be no lack of resources for the building of better cities nor of inclination to put such resources to work.

The adoption of scientific methods of assessment and taxation would have a collateral benefit of no little importance. It would solve a problem which seems otherwise practically insoluble,—the acquisition at fair prices of the land needed for the carrying-out of city planning projects and for other public purposes.

¹Quoted from *Utopia* in Morley edition of "Ideal Commonwealths."

The zoning movement, which is proving so beneficial to hundreds of American cities, began after Mr. George's migration from Earth. Hence, we now suggest as an addition to his former proposals that the development which site-value taxation would stimulate be held in check by carefully drawn zoning ordinances and scientific methods of controlling the subdivision of land, thus insuring for each community all the use it needs of public and private lands, with freedom from the overdevelopment and needlessly intensive use of certain parts of the Earth's surface which might otherwise occur.

President Eliot was one of the few leaders of American thought to emphasize in the early years of the present century the fundamental relationship to city planning of efficient government and intelligent methods of taxation. He wrote in 1909:

"What prevents the prompt execution of the needed public works? Three obstacles prevent or rather postpone it:

"(1) The absence of a well-informed, benevolent and urgent public opinion on the subject; (2) the prevailing distrust of existing municipal governments, a distrust founded on their demonstrated business incapacity; (3) the failure of the common methods of local taxation to produce an adequate revenue for municipal purposes.

"It appears, then, that reform in the laying-out of American cities must, in general, wait for the coming of two other great reforms, first, for municipal reform, and secondly for the reform of the existing methods of local taxation. Every successful effort in favor of municipal or tax-law reform will tell towards the physical and moral improvement of American cities; but in the meantime the men and women who appreciate what immense losses of life, health, happiness, and industrial effectiveness are due to the bad planning, or no planning, of American cities must do their best to enlighten the public on the whole subject."¹

To aid in the accomplishment of this challenging task, as well as to suggest some of the present-day tendencies in the technical job of the city and regional planner, is the two-fold purpose of the foregoing study.

Here endeth the report, Trends in Present-Day City Planning in the United States, by the Celestial Regions Planning Commission.

If the transmitter of this message may moralize a bit, he would call special attention to the fact that most of the trends in present-day city planning in the United States were foreseen or stimulated by leaders whose visible presence we have lost, but whose works live after them. That fact has a special significance for the student or practitioner in city planning who may be overwhelmed by the difficulty of his task and the weight of public inertia. We are all prone to forget that in a democracy reforms must usually wait

¹*The American City*, Sept. 1909.

until new ideas penetrate the minds either of the majority or of an exceptionally vigorous and influential minority whose leadership the majority will follow.

We in America have too rarely taken advantage in our city planning propaganda of the psychological principle that practice is more powerful than precept. Why should we not give a real impetus to the planning movement and to the building of better cities by making our state capitals proving-grounds for demonstrations of modern planning ideas? Washington has become a city of which the nation is proud, and an inspiration for better city building throughout the United States, because of the willingness of the Federal Government to share liberally in the financial cost involved. Could not a similar principle be applied by our forty-eight commonwealths to their capital cities? Specifically, I suggest that each state legislature appropriate the small sum which would be needed for a study and report as to how its seat of government might be developed into a more nearly ideal city, and as to how the improvements proposed might be carried out with state aid, to be repaid in large part, by benefit assessments or otherwise.

To learn lessons from adversity is a human trait which has helped greatly in the advancement of the race. We in the United States, in common with many other countries, have been passing through a distressing period of unemployment. Recent months have witnessed a growing belief that the severity of the depression would have been much less if our national, state, and local governments had made the physical and financial plans during good times for needed public works to be started when unemployment began to threaten. Here is a great opportunity for public service by the city planning profession. While continuing to urge, as they should, the carrying-out of city and regional plans during good times, let them urge also that there be spread over the cycle of prosperous years before our next depression, the preparation of additional plans which can be carried out during the depression, and much of the payment for which may be spread by the bond issue method over the prosperous years which follow the depression.

To any who can view our aims and achievements with a cosmic detachment, modern city planning in the United States must appear as lying within an infinitesimal span of time, though its processes appear tediously long to mortals perturbed by the urgency of their problems. City planners engaged in one of the most important and exacting fields of human endeavor need all of the technical proficiency they can possibly acquire. But they also need the inspiration of the prophet and the vision of the seer. As Charles Mulford Robinson well said, "Progress towards a better day for cities owes more than might be guessed to the impetus of dream and hope and high resolve. These furnish the inspiration to practical achievements."

EDITORIAL

From time to time the Harvard School of City Planning has made available for publication in CITY PLANNING a few of the papers given by visiting lecturers before the School. In the future it is hoped to increase this phase of the School's service to the public and to the professional practitioner by furnishing for publication several lectures each year. In this issue the Editors are privileged to print two distinguished papers—by Mr. Charles Moore and Mr. Harold S. Buttenheim; and if space permits some briefer paper selected from recent lectures may also be included. Similarly for the July issue, and from time to time for the future, other discussions, on various subjects and of equal interest, have been promised. The coöperation of Harvard and the lecturers themselves is hereby gratefully acknowledged by the Editors on behalf of the readers of CITY PLANNING.

ANNUAL SURVEY

The article by Mr. Buttenheim "Trends in Present-day City Planning in the United States" in this issue, through his kindness is specifically offered in place of, although not as an exact substitute for, Mrs. Hubbard's Annual Survey of City and Regional Planning. For the first time in many years this has to be omitted on account of Mrs. Hubbard's recent illness, which precluded the careful study of reports and news items necessary to make such a survey of real value. Regret at this enforced omission, however, is lessened by the fact that an extensive and interesting survey for 1930 of a somewhat similar nature has been issued as a news release by Mr. Charles H. Cheney of California, Chairman of the City and Regional Planning Committee of the American Institute of Architects. This, together with Mr. Buttenheim's bird's-eye view of present progress, will carry on many of the otherwise broken threads of the Annual Survey. As a measure of compensation for the readers of this issue who have expected the usual treatment of annual progress, the regular List of Plan Reports furnished by Miss McNamara will be found to contain annotations prepared by her in conjunction with the Editors, and also a brief

index to the principal topics under which the reports might be classified. Of course such a comprehensive report as that for Knoxville might be indexed under nearly all of the topics in addition to "Comprehensive" but no such detail has been attempted. The little index, however, will show in each field the chief special reports which would have been discussed together had the Annual Survey been written in customary form. It is in full expectation that the Annual Survey will be resumed in April, 1932, covering the year 1931, that these explanations are regretfully offered. Indeed, perhaps a brief retrospect of 1930 can then be introduced as a preface to 1931 in order that the series of surveys begun in 1912, to cover reports from 1910 on, may be considered to have reflected continuously the development of planning in the United States from the formation of the National Conference on City Planning, as an expression of the movement to remodel cities and towns, to the current era of technical thought in terms of counties and regions.

T. K. H.

VERMONT JOINS THE PROCESSION

The forty-eighth state has passed a zoning enabling act. The Vermont Senate passed it unanimously, and the House of Representatives by a vote which was nearly unanimous.

The success of this legislation is doubtless due in no small measure to the educational work of the Institute of Municipal Affairs, held under the auspices of Norwich University and furthered by Mr. K. R. B. Flint, and to the activity of the Vermont State Chamber of Commerce through its Secretary, Mr. James P. Taylor. A circular distributed by the Chamber of Commerce telling "How we can make Vermont villages and cities more and more livable, enjoyable, profitable by 'reasonable neighborly agreements as to the use of land' " must have been effective in convincing the people of the state that zoning is a desirable and necessary measure.

The pioneers who have labored these years in the cause of zoning are to be congratulated that the forty-eighth state in the Union has now authorized zoning.

J. N.

CURRENT PROGRESS

Conducted by JOHN NOLEN and HOWARD K. MENHINICK
LAWRENCE VEILLER HAROLD S. BUTTENHEIM
ARTHUR A. SHURCLIFF CHARLES W. ELIOT 2d
GORDON J. CULHAM

A COMPREHENSIVE SYSTEM OF ELEVATED SUPER-HIGHWAYS

The most striking undertaking of the Chicago Plan Commission and the most recent development in the Commission's search for the solution of the problem of street congestion, is the scheme for a comprehensive system of elevated super-highways radiating out fanshape from a rectangular by-pass route around the four sides of our central business district, commonly called the "Loop," and extending outward from the Loop to the borders of the city north, northwest, west, southwest, and south.

Michigan Avenue and Wacker Drive—both two-level streets—were the first double-deck thoroughfares of which we know that were provided for the purpose of segregating conflicting streams of traffic and of separating on the same street rapid-moving, light vehicles from slow-moving, heavy, commercial vehicles. From the success of these rather limited grade separations we naturally went on to the next logical concept: *i. e.*, that of providing complete grade separation thoroughfares as already mentioned, which will allow through-bound or long-distance vehicles to enter the city across the municipal borders on any side and to continue their journey into, and, if desired, all the way through, Chicago without using any of our ordinary streets during any part of their trip.

We vision ten or twelve of these grade separation super-highways as the next step necessary to meet Chicago's traffic problem, which can be pictured vividly by saying that every Saturday night there are one thousand more automobiles on our streets than there were the preceding Saturday. Possibly, when the figures for 1930 have been compiled, this rate of increase may not have been maintained, but it has been true year after year for so long that if the present economic depression proves to be as temporary as almost everyone anticipates, the rate of increase undoubtedly will go back to normal very quickly. Regardless of this, however, super-highways for through traffic are needed for the proper use of the cars we now have. There are about 500,000 vehicles registered in Chicago; and traffic counts show approximately 200,000 more crossing the city limits each day on the thirteen principal highways leading to and from Chicago.

From the northwest corner of the Loop, and from the rectangular by-pass route already mentioned it is planned to construct a street extending for a distance of ten miles to the northwestern city limits. This super-highway, which



Courtesy Chicago Plan Commission

WACKER DRIVE AT MICHIGAN AVENUE
Ten years after completion of Chicago's Michigan Avenue Improvement

is a fairly typical one, has been named Avondale Highway. The express roadway will be 160 feet in width for the entire distance. For the first mile after leaving the Loop the highway will be carried on viaduct construction directly above the tracks of the Chicago & North Western Railroad Company. For the remaining nine miles the express roadway will be carried on a solid fill alongside, contiguous to, and at the same elevation as these railroad tracks. In addition to the express roadway in this nine-mile section, it is planned to have a local roadway fifty feet wide paralleling the express highway but con-



Photograph by Kaufmann & Fabry Co.

**The bridge shown above, now under construction,
will span the Chicago River at its mouth**

structed at the normal street level. Ramps will connect the elevated express highway with the normal street system at strategic intervals, and this local roadway is intended both to give access to and from these ramps and to prevent the stub ending of streets which do not now pass under the railroad. All streets which now extend through the railroad embankment will also be carried through the super-highway fill.

Of course Chicago is continuously carrying out the Plan of Chicago. One of the projects now developing rapidly is the Outer Drive connection. There is much other activity along the lakefront. Besides the South Side park development which is going steadily forward, Lincoln Park is planning a 1500-acre extension, all made land. The area of the forest preserves has now reached 33,000 acres. Street widenings accomplished amount to about 100 miles, and many more miles are planned.

EUGENE S. TAYLOR,
Manager, Chicago Plan Commission.

NEW RESEARCH ANNOUNCED BY HARVARD SCHOOL OF CITY PLANNING

"Land Areas Used for Various Purposes by Urban Populations: Determination of Percentages of Land Use as an Aid to Scientific Zoning Practice" is the first subject of the 1931 research program of the Harvard University School of City Planning. The study is being directed by Mr. Harland Bartholomew.

Although the primary purpose of the research is the collection and organization of data on the use of land as a basis for scientific zoning,—especially in the allocation of areas for future uses, both as to location and amount,—the investigation has other values. Adequate judicial coöperation and authorization for expansion of existing zoning powers can be expected only when zoning is developed into a more exact science. Zoning must recognize that city building is actually a problem in supply and demand following definite economic laws. One purpose of the research is to clarify the conception of these laws. Dissemination among the general public of the findings of this study should help prevent the unfortunate compromises which are sometimes forced upon city planners by overzealous or misguided property owners. Realtors who are interested in city *building* as opposed to city *speculation* will find here a rational basis upon which to plan for municipal or regional expansion.

Computations will be made of the actual areas and the amount of frontage in use for various purposes in both self-contained and satellite cities. It is hoped that some satisfactory standard method of compilation may be evolved in order that others securing data on the same subject may organize them in a similar manner and thus make intelligible comparisons possible.

Although this study is only a beginning, it may serve to prove that there are general relationships between population and the amount of land used for various purposes and that these land uses have definite relations, one to another. Further study and refinement may develop these ratios to a point where they are invaluable in solving the practical problems of zoning.

H. V. H.

BUFFALO PLANNING BOARD

A Buffalo Planning Board of nine members was appointed by the Mayor in the fall of 1930 under authority of an ordinance of the City Council. Mr. Isaac S. Given, the chairman, has been appointed as the Mayor's alternate member on the Niagara Frontier Planning Board and as the representative of the City of Buffalo on the Niagara Frontier Planning Association. Co-operation between the regional planning organization and the planning board of the central city is thus assured.

J. N.

LECTURES AT CORNELL

A series of twelve lectures on city planning is being given this spring at Cornell University under the auspices of the Department of Landscape Architecture of the College of Architecture.

These lectures "are designed to be orientational rather than technical in character. It is hoped that they will serve to awaken curiosity and to give a general conception of what planning is and the part which it may be brought to play in the life of this country if properly developed and guided."

The series, arranged with the coöperation of Mr. Russell V. Black, includes lectures by Messrs. Jacob L. Crane, Jr., Charles W. Eliot 2d, John Nolen, Flavel Shurtleff, Justin R. Hartzog, Tracy B. Augur, Alfred Bettman, Henry Wright, F. L. Ackerman, and Gilmore D. Clarke.

H. K. M.

NEW YORK CITY HIGH SCHOOL INSTRUCTION IN ART OF CITY PLANNING

"The Community," illustrated opposite, is a page from a loose-leaf syllabus entitled "Art Appreciation," prepared by a committee of the New York City High School Art Department and used as a textbook in a course on that subject required of all boys and girls in New York City High Schools during four terms of work in the first and second years.

Various forms of technical art study have frequently been included as an elective part of a high school curriculum, but the esthetic needs of the masses have generally been overlooked. This course gives to all, and notably to those who have no marked technical ability, a chance to study creatively the art that is related to their immediate surroundings. As stated in the syllabus, "The purpose of the Art Appreciation course is to reveal to the pupil the beauty of nature and of the arts, so that he may recognize and enjoy the world of beautiful things about him and gain an appreciation of the finest, which will reflect beauty in his life and in his living."

The topics treated are The Community, The Home, The School, The Office, The Theatre, Art in Dress, Design, Color, Printing and Advertising Art, Graphic Arts, Architecture, Painting, Sculpture, and Art in Industry. The subjects actually selected for study depend, of course, upon the kind of school, student, and teacher. The aim is to interest the boys or girls in the art that is nearest their lives.

Any student who completes the work outlined under "The Community," one page of which is illustrated opposite, certainly will have acquired an appreciation of art as related to city planning.

J. N.

T H E C O M M U N I T Y

DISCUSSION TOPICS	CREATIVE PROBLEMS	VOLUNTARY RESEARCH
Your neighborhood: — schools, parks, playgrounds, churches, fire and police stations, shops, and theatres.	Sketch a plan of your neighborhood, locating the principal buildings.	Take artistic Kodak pictures of the most interesting buildings in your neighborhood. Discuss the design qualities of each building.
City planning and design found in architectural details and landscape settings.	Use as elements of design, trees, bushes, buildings, monuments, arches, and fountains. Plan a radial design.	Study plans made by landscape gardeners and by architects, for suggestions as to grouping of shrubs, trees, and buildings.
Study grouping of related buildings, stressing emphasis and subordination; e.g., college buildings, factory units, or municipal buildings.	Make a tracing from photographs or prints of groups of important buildings. Rearrange the buildings to form a better design.	Obtain pictures of groups of buildings in the city or neighborhood, and report on good and less good arrangements of these groups.
Recreation grounds for the people: parks, beaches, and ball grounds.	Study designs for shelters, pergolas, and benches. Choose the design best suited to the need of the particular recreation ground.	Visit the parks of the city. Read about the state and national parks, and obtain pictures illustrating the beauty peculiar to each.
Monuments: their placing for beauty.	Plan a new setting for a specific monument, with regard to existing surroundings.	Sketch or take pictures of arches, monuments, and fountains in your neighborhood and city, and report critically on their setting.
Planning of streets, avenues, and boulevards with regard for traffic and beauty.	Design electric light standards, artistic street designs, one-way traffic signs, or rubbish cans.	Report on traffic regulations in New York City. Compare designs of street light standards in use in various cities.
City planning as found in ancient cities; in European cities. Grid-iron and radial planning.	Study and sketch plans of the Roman Forum, or of Pompeii. Note the placing of important buildings, and of triumphal arches.	Analyze the typical home of the Romans, and compare it with present-day houses in New York.
City planning in America: Washington, Boston, or New York. Modern city planning.	Sketch the water-towers on the newer buildings in New York, or sketch front elevations of them.	Collect pictures of towers of the present buildings in New York, and compare with towers of ancient times.
New York City proposes to improve its streets and build new bridges.	Make a study of the sketches submitted for the new double-deck streets, or the new bridges. Choose the finest in line, mass, and proportion, and give reasons for choice.	Mount illustrations of the new projects of the city. Write a critical report on their artistic merits.
City ordinances controlling lighting, comfort, and the appearance of the city. Our skyscrapers and recessed buildings.	Plan a front facade of one type of building as a problem in spacing. How many buildings can you recognize by their silhouettes?	Obtain examples or make sketches of the most interesting of New York's buildings. Defend your choice in a well written statement.

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A PAGE FROM THE SYLLABUS "ART APPRECIATION"

This book is used in the Art courses of the New York City High Schools

PLANNING ACTIVITY IN CHINA AND RUSSIA

Progress on a city plan for Nanking was described last year.¹ Further activity in China in the planning of Canton and the development of a new seaport and town site have been reported by Mr. Jacob L. Crane, Jr., who left recently for consultation work in China and Russia. The seaport and town site is one of the items in the program for the development of the country outlined ten years ago by Dr. Sun Yat-sen, first president of the Chinese Republic. Despite civil warfare, the nationalist government is carrying out many improvements,—highways, railways, bridges, harbors, airways, and land reclamation.

In Russia, the Supreme Economic Council has control over state, city, and rural planning and is prosecuting them vigorously as part of the Five Year Plan. Several new cities are being planned and built.

H. K. M.

PLATTING REGULATIONS IN HAMILTON COUNTY, OHIO

Platting regulations, practically identical with those of the City of Cincinnati and applying to all the unincorporated area of Hamilton County, were passed by the Board of County Commissioners recently. In the case of a subdivision located within three miles of the corporate limits of any city having a city planning commission, the approving authority is such city planning commission, but in every other case it is the Board of County Commissioners. In all cases the Regional Planning Commission acts in an advisory capacity.

Requirements for the installation of utilities are especially noteworthy. Water mains with a connection for each lot are required where a public water main is reasonably accessible. Otherwise the subdivider is required to place on file the prescribed form of petition for the installation of water mains. Where a public sanitary sewer is reasonably accessible the subdivider is required to connect with this sewer and provide a house connection for each lot. Where a public sanitary sewer is not reasonably accessible, but where the plans for the sanitary sewer system of the district have been prepared by the County Sanitary Engineer, the subdivider is required to construct throughout his subdivision sanitary sewers in conformity with these plans even though a connection with an existing sewer main is not immediately possible. In all other cases, the subdivider is required to file the prescribed form of petition for the installation of sanitary sewers.

The existence of nearly a dozen subdivisions with no improvements other than roughly graded ditches along the margins of streets aroused the local

¹CITY PLANNING, Jan. 1930, p. 37.

health authorities. Their concern led to the organization of the Regional Planning Commission and subsequently to the adoption of the above-mentioned utility regulations.

Another factor leading to the adoption of county platting regulations at this time is the gradual migration of negro population to the outskirts of urban communities because of the elimination of tenement buildings in the "basin district" as a result of the union terminal railroad development. It is fortunate for the future of the City of Cincinnati that at this critical time the County Commissioners adopted platting rules requiring improvements.

MYRON D. DOWNS,

Engineer and Secretary,

Hamilton County Regional Planning Commission.

PROPOSED MASSACHUSETTS HOUSING AMENDMENT

The following proposed amendment to the State Constitution of Massachusetts relative to the taking and developing of land for housing has been introduced into the legislature under the sponsorship of the Massachusetts Civic League.

The General Court shall have power to authorize cities and towns to take land, to hold and to improve the same, to lay out and construct new streets, parks and playgrounds thereon, and to subdivide the said land and to sell the same to limited dividend corporations for building developments, organized as may be provided by act of the General Court, for the purpose of relieving congestion of population, remedying housing conditions detrimental to health, safety or morals, or of adapting the said lands to the social and business needs of the community.

Nearly all the great cities of the world have been empowered to take land for the purpose of improving housing conditions. In Liverpool, where this has been done and where housing has been bettered even at some cost to the city, the Public Health Service reports that the expense has been more than offset by a decrease in the public cost of disease and crime.

New York State has declared the purpose given in the above proposed amendment to be a public purpose and has made provision for giving the power of eminent domain to certain limited dividend corporations, stipulating that all profits above six per cent must revert to the State. This system is in successful operation.

While the proposed amendment may not receive immediate endorsement in Massachusetts, its introduction is significant.

J. N.

ZONING ROUNDTABLE

Conducted by EDWARD M. BASSETT

REGULATING THE USE OF LAND

Good state enabling acts for zoning always empower municipalities to regulate the use of land. If omitted, a junk yard or cement block works can be carried on in a vacant lot in a residence district. The usual state enabling act is based on the principle that reasonable zoning regulation is an invocation of the state police power. But two states, Massachusetts and New Jersey, have amended their constitutions to permit zoning. Both these constitutional amendments provide for the regulation of the use of buildings but omit any such provision regarding land. Massachusetts, however, considering that her police power was as broad as that of any state, inserted in her zoning enabling act the regulation of the use of "premises" which is generally understood to cover vacant land. The new enabling act of New Jersey, passed after the constitutional amendment, does not empower municipalities to regulate the use of land. Trouble is starting in New Jersey on this account. A local court has held that the use of a driveway cannot be regulated under a zoning ordinance. Our view is that neither constitutional amendment added to the powers of the state legislature. The legislatures of both Massachusetts and New Jersey possessed the fullest extent of the police power that is known in this country. Massachusetts now proceeds on this theory. Her zoning is under the police power of the state and is not limited by the constitution. Consequently she regulates the use of land. New Jersey ought to do the same. The zoning enabling act ought to be amended to relate to land. How can it be otherwise? The highest court of that state in the Nutley case, decided before the constitutional amendment, said that it would uphold reasonable use zoning, but said that the exclusion of a store from a residence district was not reasonable. The people of New Jersey fished around for words to add to their constitution that would make the courts right-about face. They succeeded. They added to their constitution a provision that said in substance that thereafter zoning was constitutional. This must have meant reasonable zoning. The courts had previously declared that reasonable zoning was lawful. Surely the amendment did not mean that unreasonable zoning should thereafter be lawful. But although the words added nothing to the constitution, the demonstration that the people wanted better zoning accomplished the purpose. The popular vote was the greatest ever given in that state for a constitutional amendment. The courts did right-about face. But New Jersey is now zoning under the inherent police power of states and

not under the new constitutional provision. Therefore the use of land can be regulated. The enabling act should be amended to empower municipalities to regulate the use of land.

MIDGET GOLF COURSES AND AUTOMOBILE JUNK YARDS

Problems connected with nonconforming uses of vacant land continue to agitate municipal officials throughout the country. Where a midget golf course was established before zoning, must it be allowed to continue indefinitely in a residence district? If a ticket booth was erected before zoning, can it be changed to a fruit stand or lunch counter after zoning on the ground that as a nonconforming use it can be changed to any use of the same class?

Where a yard containing three or four half-dismantled automobiles is placed in a residence district, can the owner of the yard after zoning insist that he is entitled to use the entire yard as an automobile junk-yard? Where before zoning a vacant lot was used as an outdoor garage, can the owner insist that it be indefinitely so used in a residence district? If it had a ticket booth, can the booth be enlarged for a repair station after zoning?

The ordinary zoning ordinance provides that existing buildings and the uses of existing buildings and land can be continued after the new zoning ordinance is established or the land is put in a new district. In other words, the existing use of nonconforming buildings and land is allowed to continue. Our suggestion is that this permission be confined to buildings and their uses. There is no legal reason in most states why this permission should be extended to vacant land. We all have considered it to be axiomatic that zoning should not be retroactive. In the early days of zoning it was seen that, if nonconforming buildings and uses were compelled to comply with the zoning regulations, there would be a great loss of honest investments. Consequently, these nonconforming uses were protected by a specific provision in their favor. But there is nothing in the nature of the police power which requires that hurtful uses shall be protected. If a use or building is injurious to the community health, safety, morals, and general welfare, it can under the police power be ousted. In the early case of *Hadacheck* arising in Los Angeles before the days of comprehensive zoning, a brickyard was ousted from a so-called residence district although it had been long in existence. The taking of the clay from the earth was not prohibited, but the court declared that the clay could not be treated in that district. This case was upheld by the United States Supreme Court. Our state enabling acts for zoning almost without exception give municipalities power to provide for retroactive zoning. This is the case with the standard form of state enabling act put out by the Department of Commerce. It is good sense to extend this privilege of continuity to nonconforming buildings and their uses, but we are finding out that extending the same privilege to uses of vacant land is probably a mistake.

If the usual section commonly called "Nonconforming Uses" should omit any reference to "premises" or vacant land, no reasonable objection could be made. Owners of nonconforming midget golf courses, outdoor parking spaces, or automobile junk-yards expect that their land will be used for buildings within a few years, and they would not ask that the present use should be made a handle to assist them in erecting a nonconforming building. No municipality would be drastic in the treatment of such uses of vacant land. We have no doubt that the operator of a midget golf course or open-air parking space would be allowed to continue for a reasonable time in a new residential district. The trouble is that property owners are under the present clauses insisting upon rights that it was never intended that they should have.

PIECEMEAL ZONING

If in a residence district a nonconforming filling station is on one corner, can the owner of an opposite corner insist as a matter of right that the map shall be changed to allow another filling station? If one answers this question affirmatively, then in the original zoning map wherever a filling station is on one corner the other three corners should be zoned in a way to permit the same use. We think that the council should not change the map. If another filling station is permitted, it should be allowed by the board of adjustment as a variance. But undoubtedly there should be other and additional reasons beside the fact that one of the corners is occupied by a nonconforming filling station. We do not doubt that the board of adjustment of Denver made a proper determination in refusing the variance. We cannot know positively without having all the facts. But we can say that it would be unwarrantable for the council to change the map for a single additional corner. But here is the whole correspondence.

E. M. B.

CITY AND COUNTY OF DENVER
BOARD OF ADJUSTMENT
ZONING

DENVER, COLORADO

January 16, 1931

My dear Mr. Bassett:

I am attaching herewith a carbon copy of a letter which the Board is sending to the city council with reference to a proposition to change the zone on one corner of a street intersection.

We have had several applications of late in which the applicant desired to erect certain lower zone uses in higher zones and these applications were denied by the Board after due notice and hearing, because they were not borderline cases and there were no similar uses in the neighborhood. The applicant then went to certain members of the council and endeavored to get the council to change the boundaries of the zone map and re-zone his particular corner in order that he could erect thereon a business use.

This attached letter refers to a case where the applicant wanted to erect a gasoline filling station in a Residence "C" District and was denied a permit by the Adjustment Board, and he then endeavored to get the council to re-zone the corner. When the proposed amending ordinance was introduced in the council, the same was referred to the Board for recommendation. The Board refused to recommend any such change.

I thought, perhaps, the Board's reasons for refusing to recommend this change would be of interest to you, as this type of zoning would be similar to that in effect in some of the Pacific Coast cities where their ordinances do not provide for Adjustment Boards.

Very sincerely yours,

FRED W. AMETER,
Secretary-Engineer.

CITY AND COUNTY OF DENVER
BOARD OF ADJUSTMENT
ZONING
DENVER, COLORADO

January 15, 1931

The Zoning Committee of
The Council of the City and County of Denver.

Gentlemen:

We are in receipt of your copy of Councilman's Bill No. 6, Series of 1931, the purpose of which is to re-zone the northeast corner of East 18th Avenue and Vine Street by changing same from a Residence "C" District to a Business "A" District.

Subsequent to the meeting of the Board of Adjustment with your committee, the members of the Board have considered the proposed ordinance at length and recommend that the same be not passed. The reasons on which this adverse recommendation is based are, roughly speaking, as follows:

The proposed ordinance is an example of what is known as piecemeal zoning. Such zoning consists in picking out one specific location and making a change in the zone for the benefit of a particular property owner. Without going into detail it is sufficient to point out that zoning of such a type has occasioned the utmost confusion in the Pacific Coast cities, the majority of which do not have adjustment boards, and the moral of which is that matters of the kind in question should be left untouched.

Further, it is scarcely necessary to state that if the proposed ordinance becomes law the various members of the Council will be deluged with requests for special zoning in innumerable specific cases. The final result will inevitably be that the zoning ordinance will be broken down and a condition will follow which it is the particular purpose of a board of adjustment to prevent in the exercise of as wise discretion as it can command.

We also call attention to the fact that in every situation of this kind the value of the particular piece of property for the new and proposed use depends on prohibiting neighboring and adjacent property from

being put to the same use. In other words, one property owner reaps a financial advantage from being permitted to do something which his neighbors are prohibited from doing—an advantage which would not accrue in case all were given the same right or none were given the right.

Several attempts have been made to put the property covered by the proposed ordinance to a use not in harmony with the zoning ordinance and map. In each instance, the Board has been of the opinion that all the property owners in that neighborhood should be treated alike and that discrimination in favor of any one would not only be unfair, but would probably receive the condemnation of both people generally and of the courts.

As the members of the Council are probably aware, a gasoline filling station has been in existence on the southwest corner of East 18th Avenue and Vine Street since prior to the passage of the zoning ordinance. The courts recognize uses antedating the ordinance in all cases and recognize the validity of their classification as nonconforming uses. Such a use by its very name is one that is identified as being out of harmony with the general character of the neighborhood or district. So far as the Board is aware no court, however, has permitted an operation by which a conforming piece of property is picked out and permitted to become nonconforming for the benefit of one property owner at the expense of the remaining owners. Such a change is properly regarded as discriminatory under our form of ordinance. When the whole neighborhood or district has reached a point that changes are imperative there should be a complete re-zoning thereof, to avoid piecemeal zoning with its consequent favoritism.

Incidentally, the cost of a change such as that proposed is considerable, as the charter provisions regarding advertising, etc., entail an expense out of all proportion to the importance of the measure.

In consideration of the foregoing, therefore, the Board of Adjustment recommends that the proposed ordinance do not pass.

Very respectfully yours,

BOARD OF ADJUSTMENT

By W. W. GRANT, Jr., *Chairman*.

THE PREPARATION OF ZONING ORDINANCES: A Guide for Municipal Officials and others in the Arrangement of Provisions in Zoning Regulations (Preliminary Edition) has been published by the Division of Building and Housing of the United States Department of Commerce.

As stated in the introduction: "It is in no sense a model ordinance It is designed to aid in a satisfactory arrangement of provisions in the ordinance, to promote uniformity in form and arrangement, and to point the way to economy of time in the drafting and use of such ordinances It is not intended as a substitute for a zoning consultant."

LEGAL NOTES

Conducted by FRANK BACKUS WILLIAMS

PROGRESS OF CITY PLANNING LAW DURING 1930

Most important in the field of planning law is that part of it dealing with the subject comprehensively. Here the most important event is the new Planning Commission Law of New Jersey.¹ This statute is based upon the police power, like the pioneer New York laws² which, in principle, it follows. In these laws, the erection of buildings in the bed of mapped streets is forbidden, except in unusual cases by permission of the Board of Appeals and subject to necessary limitations and conditions to safeguard the city plan. Similarly the erection of buildings not on mapped streets is discouraged, and in the control of subdivision a reasonable reservation of playground space for neighborhood use is required of the developer.³

The police power methods just outlined have not as yet been passed upon by our courts. The New York and New Jersey statutes are enabling acts which communities in these states may but are not compelled to adopt and follow. In New York State a rapidly increasing number of cities, villages, and towns are taking advantage of the law, but as yet its validity has not been passed on by the courts. The only case under it⁴ arose with regard to its platting provisions, which were upheld; but the court seemed to regard the laws with general favor.

The number of planning commission statutes drawn more or less in the light of recent investigation and improved practice in this country is increasing. To this number must be added the Kentucky Statute,⁵ which adopts police power or distinguishes from eminent domain methods of procedure. The act is a combined planning and zoning act and in zoning it follows the standard form. Kentucky has also passed an improved highway law.⁶

¹Laws, 1930, ch. 235.

²Laws, 1926, ch. 690, 719; 1927, ch. 175.

³It will be remembered that the Standard Planning Act, prepared by the United States Department of Commerce, while mentioning the police power method adopted by New York and New Jersey, gives preference to a method of preventing buildings in mapped streets, and buildings not related to such streets, by the use of eminent domain.

⁴*Kraushaar v. Village of Lawrence*, Supreme Court, Nassau County, reported in *New York Law Journal*, July 2, 1930.

⁵1930, ch. 86.

⁶1930, ch. 87.

Of the large cities in this country, the largest, New York City, has been the slowest in adopting improved basic planning procedure. During the last year it created¹ a Department of City Planning, consisting of a single commissioner with advisory powers.

It is noteworthy that in the State of Massachusetts, with its planning commission laws, the City of Boston resorts to a special act² authorizing the Mayor to adopt a major thoroughfare plan after receiving it from the City Planning Board, the Board of Street Commissioners, and the Board of Park Commissioners of the City. The act provides that no thoroughfare shall be laid out subsequently until a general plan has been submitted to these three boards; and if any of them disapproves, the same may be carried out only on the approval of the Mayor.

ESTHETICS

A notable event in this field has been the enactment of the New Jersey Statute³ with regard to billboards or other forms of outdoor advertising. The new law imposes a substantial tax on the industry and also regulates the boards on public and private property, to promote public safety and prevent public disfigurement.

It thus provides that no billboard shall be erected or maintained within fifty feet of the intersection of a highway with another highway or railroad or street railway, at a point where it will interfere with or obstruct the view of a street car or other vehicle on the intersecting highway, railroad, or street railroad. "Vision clearance" statutes similar in principle have been passed in many states. They do not forbid the erection of a building or other substantial improvement on the private property in question; but may perhaps be defended as not an unreasonable infringement of private property rights on account of the lower value of billboards, if indeed they do not illustrate a tendency to regulate an ugly structure for a reason that can be defended as not esthetic. There are now many cases upholding vision clearance without compensation in the case of billboards, one of which arose in Oklahoma during the last year.⁴

The New Jersey law goes on to provide that no permit shall be issued for a billboard which in the judgment of the Commissioner of Motor Vehicles is or may be injurious to property in the vicinity or injuriously affect public interest, nor on any place where it is and shall be prohibited by municipal ordinance. It will be most instructive to see the attitude of the New Jersey courts upon this sweeping provision when it comes before them.

¹Local Laws, 1930, No. 16.

²Laws, 1930, ch. 168.

³Laws, 1930, ch. 41 (p. 217).

⁴Gibbons v. Mo. K. T. R. Co., 285 Pac. 1040.

The law also applies to existing structures with the proviso that there shall be no interference with existing boards until the expiration of the present contracts for their maintenance.

The cases supporting regulation of billboards on private property for what would seem to be esthetic reasons are increasing. An Indiana case¹ in point was so fully reviewed in these Notes for January, 1931, that it calls for no further notice at this time.

AIRPORTS

The cases already supporting municipalities in the acquisition of land for airports, and the use of land now owned by them for that purpose, were added to last year;² also the statutes expressly authorizing it.³ The United States Department of Commerce has prepared a model act for that purpose.⁴

It has been held that a city cannot, in the absence of statutory authority, lease its airport to others for operation. There are now many statutes expressly empowering municipalities to make such leases. It has already been decided that such statutes are constitutional; and this year adds another to these cases.⁵

Most important to airports is the right of aviators to traverse the air. Previous to last year there were no modern cases of great importance on this subject. In that year two cases⁶ were decided which, if they did not settle all the questions in this field, are at least most significant. These cases have been discussed at some length in these Notes. It is sufficient, therefore, to say here that apparently the aviator doing no nuisance has the right to traverse the higher air, either because the landowner beneath does not own the air space at that height above him, or because the aviator is given that right by statutes which are a valid exercise of the police power; but at lesser heights, fixed at below 500 feet, the tendency is to recognize the rights of the landowner.

EXCESS CONDEMNATION

Excess condemnation has at last reached the Supreme Court of the United States;⁷ but we are no wiser than before, for that Court, instead of passing upon its validity, decided the case on a minor point.

¹General Outdoor Advertising Co. v. City of Indianapolis, 172 N. E. 309.

²Stern v. Jersey City, 150 Atl. 9 (N. J.).

³State ex rel. City of Walla Walla v. Clausen, 289 Pac. 61 (Wash.). The land was outside the limits of the municipality.

⁴Virginia Laws, 1930, ch. 334.

⁵See Air Commerce Bulletin for Jan. 2, 1931, published by the Aeronautics Branch of the Department.

⁶Concordia-Arrow Flying Service Corporation v. City of Concordia, 289 Pac. 955 (Kan.).

⁷Smith v. N. E. Aircraft Co., Inc., 170 N. E. 385 (Mass.). *Swetland v. Curtiss Airports Corporation*, 41 Fed. (2d) 929 (O.).

⁸Cincinnati v. Vester, 281 U. S. 439.

In New York, the Courts have held that the power to take in excess does not extend to the taking of additional land after the principal improvement is finished, but must be exercised in connection with the taking for the principal improvement.¹

ZONING

Most numerous, as always, are the zoning cases, of which the following may be of interest:

A variance between the title and the body of a zoning ordinance does not affect its validity.²

The exclusion of a consumption hospital from a residential district is unreasonable and invalid.³

A police power setback whose purpose is to reserve land for future street widening is invalid.⁴

Land may be condemned for a golf course as an educational purpose of the State University.⁵

A miniature golf field cannot be admitted into a residential district as a playground, a public recreation building, or a golf course.⁶

Most important are the decisions with regard to reasonableness under all the circumstances peculiar to the case in question. Thus it has been held:

(1) That the establishment of an amusement park on a small island in the midst of a thickly settled community a few miles from the business center of a large city, on a three-acre tract having a lake frontage of 200 feet, is a nuisance.⁷

(2) That the making of parts of two city lots, 214 feet square in all, situated in the center of a one-family residential district, into an apartment district, is unreasonable, evidently not for a public purpose, and unjust to other property owners.⁸

(3) That an amendment to the zoning ordinance of the City of Chicago changing the maximum street-line height of buildings on lots having frontage on three streets from 264 to 440 feet, made six years subsequent to the adoption of the ordinance, after the construction of from sixty to seventy buildings under the original ordinance, would unreasonably impair the value of existing buildings.⁹

F. B. W.

¹In re Monroe Avenue, Rochester, 237 N. Y. S. 147.

²Robert L. Evans, Inc., v. Williams, Building Inspector of Roselle, 148 Atl. 206 (N. J.).

³Jewish Consumptives Relief Society v. Town of Woodbury, 230 App. Div. (N. Y.) 229. There are cases on all phases and sides of this question.

⁴State ex rel. Wittenberg v. Board of Appeals of City of West Allis; Circuit Court, Milwaukee County (Wis.), Dec. 6, 1929.

⁵People for Benefit of Regents of University of Michigan v. Pommering, 230 N. W. 194.

⁶Breba Realty Co. v. City of White Plains, Supreme Court, New York City, Aug. 7, 1930.

⁷Tuttle v. Fitchett, 287 Pac. 7 (Wash.).

⁸Schwan v. City of Eau Claire, Circuit Court, Eau Claire County (Wis.), June 24, 1929.

⁹Michigan-Lake Building Corp. v. Hamilton, 172 N. E. 710 (Ill.).

Note: The building in question is the Cuneo Tower Building.

N. C. C. P. & A. C. P. I. NEWS

Conducted by FLAVEL SHURTLEFF, Secretary

THE PLANNING CONFERENCE OF 1931

The Twenty-second Annual Meeting of the National Conference on City Planning will be held in Rochester, New York, from June 22 to June 24 inclusive. It is very fitting that the twenty-first birthday of the Conference should be celebrated in the city where its first meeting was held in 1910.

Rochester ranks high as a planning city. Its Planning Commission has a long and successful record and for the last two years has had the support of a very progressive Civic Association. Monroe County has a County Plan Commission with a technical staff and an adequate appropriation.

For the first time in the history of the Conference, one session will be divided into section meetings discussing respectively "Special Zoning Problems," "Procedure in Condemnation and Assessment," and "A County Planning Program." There will be official reporters at each of these sections who will digest the papers and discussions and present a report at a session subsequent to the Rochester Conference.

There will be an evening session devoted to Rochester's planning achievements for the last twenty-one years.

Among the other subjects which will be discussed are: "Civic Centers in Small Cities," "Mass Transportation on the City's Streets," and "Official Plans—The Basis of Effective Planning."

INSTITUTE SPRING MEETING

At the spring meeting of the American City Planning Institute held in New York City, Mr. Herbert Swan presented a consideration of building lines established by eminent domain as distinguished from the front-yard or setback line of the zoning ordinance and from building lines contained in covenants running with the land. Surveying the practice in many cities of Connecticut where there is much experience with eminent domain building lines, Mr. Swan concluded that in carrying out major thoroughfare plans the eminent domain building line may always be expected to have an undisputed field of usefulness. The lessons taught by the experience of Connecticut cities, extending over a period of three-quarters of a century, point to the following general conclusions:

1. The building line easement should be sufficiently broad in scope to permit at some later date, if needed, the inclusion of the land affected within the street lines themselves.

2. All building lines hereafter established should be established with reference to the requirements of the street widths laid down in the major thoroughfare plan.
3. No existing building line should hereafter be modified or vacated until after the municipality has formulated a major thoroughfare plan and then only in conformity with the requirements of such thoroughfare plan.
4. Buildings projecting beyond a proposed building line might, to reduce the cost of the establishment of the building line, be allowed to remain unmolested for a reasonable term of years up to a fixed limit, after which they should be required to observe the line.
5. Building lines as an intermediate means of ultimately obtaining wider streets should be limited in their application principally to streets already laid out; in new subdivisions, streets should generally be accorded their ultimate widths when the land is originally platted.
6. Only in exceptional instances should the protection of front yards as such be attempted through building lines; wherever at all practicable, the amenities of a residence district should be safeguarded through zoning.
7. Building lines and zoning regulations should complement and dovetail into one another to avoid unnecessary conflict.
8. Building lines should generally be financed through benefits assessed upon abutting property.
9. The initiative in establishing building lines should be taken by the planning commission, which, instead of waiting for petitions from property owners, should take the aggressive in having adequate lines laid down on all streets incorporated in the major thoroughfare plan.

In his paper on "The Control of Subdivisions by Planning Commissions," Mr. Morris Knowles contended that the Planning Commission should not undertake detailed planning of subdivisions, and that without a well-considered plan of main thoroughfares there is little to be gained by the exercise of subdivision control by the Planning Commission. He suggested that minimum requirements for the acceptance of subdivisions should include:

- (1.) All streets graded and surfaced (not necessarily hard surfaced).
- (2.) Water mains installed, including adequate provision for fire protection.
- (3.) Sanitary sewers, including satisfactory means of disposal, or connection to an existing sewerage system.
- (4.) Sidewalks, curbs, and gutters.

The experience of American cities has demonstrated that after the lots of a subdivision have been sold and built upon, then curing the mistakes of the layout has become too costly, prohibitively costly. . . . Over-intensification of building, once it takes place, remains incurable and its evil effects upon health and order remain incurable. Slums, congested territory without adequate open spaces for light and air, streets that do not fit into each other but require inconvenient off-sets or huge expenditures to widen or to cut new streets through built-up territory; all these experiences demonstrate that, in city life, an ounce of prevention is worth a pound of cure.—ALFRED BETTMAN.

The volume of Proceedings of the National Conference on City Planning at Denver in June, 1930, has been published and will be reviewed in the July issue.

BOOK REVIEWS & LISTS

Conducted by THEODORA KIMBALL HUBBARD

LIST OF PLAN REPORTS IN THE UNITED STATES, 1930

Compiled in the Library of the
Schools of Landscape Architecture and City Planning at Harvard University

By KATHERINE McNAMARA, Librarian

Comprehensive City Plans

Knoxville, Tenn.
LaGrange, Ill.
Little Rock, Ark.
Ridgewood, N. J.

Preliminary Reports, and Summaries

Los Angeles, Calif.
Philadelphia, Pa.
Scranton, Pa.

Regional, County, and Joint Reports

Buffalo, N. Y.
Detroit, Mich.
Harrisburg, Pa.
LaGrange, Ill.
Lexington, Ky.
New York, N. Y.
Oakland, Calif.
Passaic County, N. J.
Philadelphia, Pa.
Reading, Pa.
Rochester, N. Y.
Union County, N. J.
Washington, D. C.

Major Street Plans and Traffic Relief

Atlanta, Ga.
Bayonne, N. J.
Boston, Mass.
Buffalo, N. Y.
Denver, Colo.
Detroit, Mich.
Kansas City, Mo.
Montecito, Calif.
New York, N. Y.
Philadelphia, Pa.
Rochester, N. Y.
San Diego, Calif.

Transit and Terminals

Bayonne, N. J.
Cleveland, O.
Detroit, Mich.
Evansville, Ind.
Philadelphia, Pa.

Waterfront Development

Bayonne, N. J.

Zoning and Platting

Denver, Colo.
Lexington, Ky.
Montecito, Calif.
Washington, D. C.

Parks and Recreation

Flint, Mich.
New York, N. Y.
Oakland, Calif.
Passaic County, N. J.
Philadelphia, Pa.
Rochester, N. Y.
Union County, N. J.

Civic Centers and Civic Art

Bayonne, N. J.
Los Angeles, Calif.
Montecito, Calif.
Richmond, Calif.
Washington, D. C.

Financial Programs

Detroit, Mich.

ATLANTA, GA. MAYOR'S TRAFFIC COMMISSION. Traffic survey. New York, Safety Service, Policy Holders Service Bureau, of Metropolitan Life Insurance Company, 1929. 112 p. mimeographed. folded maps, diagrams, charts, tables (part folded).

A fact-finding survey, with recommendations.

BAYONNE, N. J. CITY PLAN COMMISSION. 1930 report, including plans for development of East Side waterfront, a system of rail and highway communications, a civic center. July, 1930. 65 p. photo., maps and plans (part folded, part colored), folded bird's-eye perspective, diagrams, charts, tables. (Harold M. Lewis, engineer, Charles Herrick, assistant engineer.)

An attractive and well studied report presenting the later developments in the waterfront projects of 1929 and a study of the transportation facilities required to serve the newly developed areas.

— ——. *See also* **NEW YORK CITY AND METROPOLITAN REGION.**

BERKS COUNTY, PA. *See* **READING, PA., AND REGION.**

BOSTON, MASS. CITY PLANNING BOARD. Report on a thoroughfare plan for Boston. Boston, Mass., 1930. 236 p. photos., maps and plans (part folded), cross sections, diagrams, charts, tables (one folded). (Robert Whitten, consultant.)

A valuable and important study, the result of three years of careful investigation, during which an unusually complete traffic analysis and forecast was prepared. The report recommends a construction program covering a period of twenty-five years.

BUFFALO, N. Y., AND NIAGARA REGION. NIAGARA FRONTIER BRIDGE COMMISSION. Report to the Governor and Legislature. Albany, 1930. 121 p. photos., maps, plans, perspectives, elevations, cross sections (part folded), charts, tables. (Legislative Document, 1930, No. 94.)

A study of the Grand Island Bridge project which, when completed, will shorten the traffic route between Buffalo and Niagara Falls. The report contains bridge designs, traffic studies, and financial plans.

CLEVELAND, OHIO. SHAW, A. H. C. Report to City Plan Commission on the development of the Cleveland municipal airport. 1929. 19 p. mimeographed. blueprint map.

Supplementary data on additional airfields and on proposed lakefront air terminal included in report.

DENVER CITY AND COUNTY, COLO. BOARD OF ADJUSTMENT. Fifth annual report, zoning. Feb. 11, 1929 to Feb. 11, 1930. 31 p. photos., plans.

Interesting review of cases and of requirements as to loading and unloading courts provided in Denver ordinance.

— ——. PLANNING COMMISSION. The Denver plan, Volume 2: a survey of traffic. 1931. 31 p. maps, plans (part folded), tables. (S. R. De Boer; McCrary and Culley; C. B. Spencer, consultants.)

Deals entirely with facilitation of traffic movement. Based on data collected in 1930.

DETROIT, MICH., AND REGION. DEPARTMENT OF PUBLIC WORKS. Aircraft landing facilities in the Detroit district. April 1, 1929. 28 p. photos., maps and plans. (Perry A. Fellows, city engineer.)

The result of a survey of existing facilities, well illustrated.

— ——. — ——, CITY PLAN COMMISSION, AND RAPID TRANSIT COMMISSION. Proposed ten year program for street widening: report presented to The Honorable The Common Council. March 22, 1930. 18 p. maps and plans, tables.

Interesting as an example of long-term financial planning for capital improvements, including participation of city, county, and state.

— ——. MILWAUKEE JUNCTION MANUFACTURERS ASSOCIATION. ENGINEERS COMMITTEE ON GRADE SEPARATIONS. Report presented to cities of Detroit, Highland Park, and Hamtramck, March 6, 1930. Detroit, Rapid Transit Commission, 1930. 39 p. photos., maps and plans, perspectives, elevations, cross sections, tables.

Contains detailed recommendations largely for elimination of railroad grade crossings.

— ——. RAPID TRANSIT COMMISSION. Vehicular traffic in 1930. Detroit, November 26, 1930. 79 p. maps and plans, diagrams, charts, tables. (Daniel L. Turner, consulting engineer.)

Interesting for comparison with previous check-ups. Contains significant charts, tables, and diagrams.

DISTRICT OF COLUMBIA. See **WASHINGTON, D. C., AND NATIONAL CAPITAL REGION.**

EAST BAY CITIES, CALIF. See **OAKLAND, CALIF., AND REGION.**

EVANSVILLE, IND. CITY PLAN COMMISSION. Transit facilities. The fifth of a series of city planning studies. 1930. 29 p. maps and plans, diagrams, tables. (Bartholomew and Associates, Harland Bartholomew and Earl O. Mills, city plan and landscape engineers.)

Pertains largely to rearrangement and extension of track. Closely related to earlier report which outlined the major street plan.

FLINT, MICH. PARK BOARD. Park board history and twenty-second annual report, March 1, 1928 to February 28, 1929, inclusive. 68 p. photos., map, plan, tables.

The first published report of the board. Well illustrated. Records adoption in 1927 of comprehensive park system designed by Warren H. Manning.

HAMTRAMCK, MICH. See **DETROIT, MICH., AND REGION.**

HARRISBURG, PA., AND REGION. WEST SHORE REGIONAL PLANNING FEDERATION. Constitution. Harrisburg, Pa., 1930. 8 p.

Noting the organization of eight communities for planning.

HIGHLAND PARK, MICH. See **DETROIT, MICH., AND REGION.**

KANSAS CITY, MO. ALBERT RUSSEL ERSKINE BUREAU. A traffic control plan for Kansas City. Kansas City, Mo., Chamber of Commerce, 1930. 251 p. maps and plans, diagrams, charts, tables. (Miller McClintock, director.)

A considerable volume with a large number of plates presenting graphically the essential facts and conclusions. While compiled primarily for Kansas City it might well be used by other cities as an example of procedure.

KNOXVILLE, TENN. CITY PLANNING COMMISSION. A comprehensive city plan for Knoxville. 1930. 232 p. photos., maps and plans (part folded and colored), folded perspective, diagrams (one folded), charts, tables. (Harland Bartholomew and Associates.) Price \$1.50.

A substantial and important work including plans under construction. The result of studies begun September, 1926, of which the major street plan is published.

LAGRANGE, WESTERN SPRINGS, LAGRANGE PARK, ILL. VILLAGE PLANNING COMMISSIONS. A collaborative town plan for the development of three suburban villages. October, 1930. 51 p. photos., maps and plans (part folded, one colored), perspective sketches, cross sections. (Jacob L. Crane, Jr., consultant, George F. Ingalls, George W. Olcott, Fletcher Seymour, associates.)

An excellent example of a collaborative planning project.

LEXINGTON, KY., AND REGION. CITY PLANNING AND ZONING COMMISSION. Building zone ordinance for the City of Lexington, Kentucky, and environs. 54 p. folded map, tables. (L. Segoe, consulting engineer and city planner.)

Significant for inclusion of environs within two miles of city limits.

LITTLE ROCK, ARK. NOLEN, JOHN, AND ASSOCIATES. City plan, Little Rock, Arkansas, 1930. Council of City of Little Rock, City Planning Commission and City Departments. 24 p. photo., plans (two colored), cross sections, table.

Digest of survey and plan recommendations in attractive form.

LOS ANGELES CITY AND COUNTY, CALIF. BOARD OF CITY PLANNING COMMISSIONERS. Annual report, July 1, 1929 to June 30, 1930. Los Angeles, Department of City Planning, June, 1930. 76 p. photos., maps and plans, sketches, charts, diagrams, tables. (Gordon Whitnall, director manager.)

An attractive report with popular appeal. Contains detailed reports on zoning, land subdivision, master plan, building lines, civic center, etc., and exceptionally good contrasting aerial views showing changes of ten years.

———. MUNICIPAL ART COMMISSION. Annual reports, 1921-1929. Los Angeles, Department of Municipal Art, April 1, 1930. 14 p. text + 86 p. photos. and sketches.

A graphic record of civic art in Los Angeles, significant because of great activity of art commission.

———. REGIONAL PLANNING COMMISSION. Administrative Center, Los Angeles, California. [1930] 8 plates. maps, plans, perspective sketch. (Charles H. Diggs, director.)

A collection of photostat plates, without text, including maps, plans, and sketches for the proposed development of the civic center.

MONROE COUNTY, N. Y. See **ROCHESTER, N. Y., AND REGION.**

MONTECITO, CALIF. SANTA BARBARA COUNTY PLANNING COMMISSION. Preliminary report upon highway and zoning problems, Montecito. Santa Barbara, Calif., December, 1930. 64 p. mimeographed. photos., perspectives, cross sections, diagrams, charts, tables (part folded). (L. Deming Tilton, director of planning.)

Concerns zoning and its relation to highway plans, with constant reference to esthetic considerations for preservation of community character.

NEW YORK CITY AND METROPOLITAN REGION. BERRY, CHARLES W. New York City's parks, playgrounds and parkways and their proposed extension. New York, Board of Estimate and Apportionment, July, 1930. 45 p. photos., folded maps.

A report to Mayor Walker based on a study by a special committee of the existing system of recreational spaces, plans for increasing their number and variety, and recommendations designed to carry the plans into effect.

———. DAY AND ZIMMERMAN, INC. Report to the Honorable James J. Walker, Mayor, on highway traffic conditions and proposed traffic relief measures for the City of New York. New York, October, 1929. 201 p. photos., folded maps and plans, diagrams (part colored), charts, tables.

An engineering study, with recommendations, of the traffic situation in New York City, presented to the Board of Estimate and Apportionment. Fully illustrated

———. PORT OF NEW YORK AUTHORITY. First progress report on Kill Van Kull bridge between Bayonne, N. J., and Port Richmond, Staten Island, N. Y. New York, April, 1930. 39 p. photos., perspective sketch, plan, cross sections, folded elevation, folded chart and tables.

An important element in traffic relief plans for Staten Island and the Bayonne region of New Jersey.

———. Third progress report on Hudson River bridge at New York between Fort Washington and Fort Lee. New York, April, 1930. 45 p. photos., plans (part folded), perspectives, folded chart.

Report states bridge likely to be opened to traffic early in 1932. Contains interesting illustrations of the construction work.

———. REGIONAL PLAN OF NEW YORK AND ITS ENVIRONS. Regional survey. New York, 1931.

Vol. 6: Buildings: their uses and the spaces about them. Comprising three monographs: The character, bulk and surroundings of buildings, by Thomas Adams; Housing conditions in the New York Region, by Thomas Adams in collaboration with Wayne D. Heydecker; Control of building heights, densities and uses by zoning, by Edward M. Bassett; assisted by Harold M. Lewis and Lawrence M. Orton. Final volume of the Survey series. The atlas volume of the Plan series is now in press.

———. WESTCHESTER COUNTY PARK COMMISSION. Report to the Board of Supervisors of the County of Westchester, State of New York, April 30, 1930. 132 p. photos., sketches, charts, tables.

Includes summary of park system, with total appropriations. Illustrations of special interest.

NIAGARA REGION. *See* **BUFFALO, N. Y., AND NIAGARA REGION.**

OAKLAND, CALIF., AND REGION. OLMSTED BROTHERS, AND ANSEL F. HALL. Report on proposed park reservations for East Bay cities (California). Berkeley, Bureau of Public Administration, University of California, December 1930. 40 p. photos., folded and colored plan. (Prepared in consultation with the East Bay Regional Park Association.)

Report on the proposed utilization of surplus lands of the East Bay Utility District for park purposes.

PASSAIC COUNTY, N. J. PASSAIC COUNTY PARK COMMISSION. Report for 1928-1929. Paterson, N. J., 1930. 52 p. photos., maps, charts, tables. (Olmsted Brothers, consultants.)

Contains a history of the movement for a county commission, a record of excellent initial progress, and a well-rounded program of future development.

PHILADELPHIA, PA., AND TRI-STATE DISTRICT. CITY PLANNING COMMISSION. Report presented to Mayor Mackey and City Council, November 12, 1930. 9 p. folded plan. (Jacques Greber, consultant architect.)

A comprehensive outline.

———. MITTEN MANAGEMENT, INC. Philadelphia traffic survey. Report No. 5: West Philadelphia. Report No. 6: North Philadelphia. May, 1930, and November, 1930. 36 p. and 45 p. maps, folded plans, elevations, and cross sections (part colored), diagrams.

Mitten Management reports as owner and operator of rail and vehicular transportation facilities in Philadelphia. Preceding reports in series appeared in 1929.

———. MURDOCH, ALEXANDER, AND LIEUT.-COL. HARRY H. BLEE. Reports and recommendations for a municipal airport for the City of Philadelphia. Philadelphia, Department of Public Works, 1929. 30 p. maps and plans.

Mr. Murdoch is director of the Department of Public Works, Philadelphia, and Lieutenant-Colonel Blee is Chief of the U. S. Division of Airports and Aeronautics Information.

———. THE PHILADELPHIA BUSINESS PROGRESS COMMITTEE. A plan for the development of the Philadelphia terminal, air—marine—rail. September 6, 1929. 18 p. mimeographed + maps and plans (part folded), folded perspective sketch, diagrams.

A preliminary study to fix allocation of space within the Hog Island tract to permit each agency of transportation to operate most efficiently.

———. PHILADELPHIA CHAMBER OF COMMERCE. Research and Statistical Bureau. Report on zoning with special reference to use of buildings: a brief study based upon ordinances of zoned cities and reports of leading authorities on zoning. December 1, 1929. 42 p. multigraphed. tables.

The second section of report treats specifically of Philadelphia and its needs.

- ——. REGIONAL PLANNING FEDERATION OF THE PHILADELPHIA TRI-STATE DISTRICT. POPULATION COMMITTEE. Population trends: a statement of the effects of population trends upon planning in the Philadelphia Tri-State District. Philadelphia, December, 1930. 32 p. photos., maps, sketches, diagrams, tables.

A well prepared illustrated study of an important basis of regional planning.

- ——. AVIATION COMMITTEE. Regionally planned ground-work: airways and airports for the Philadelphia Tri-State District. Philadelphia, April, 1930. 32 p. photos., maps.

Preliminary study of the aviation needs of the region in advance of the completion of the regional plan.

- ——. STOREY, CHARLES J. A study of municipal recreation in Philadelphia, May 1929. Philadelphia, Playgrounds Association. Part I. 26 p. mimeographed. diagrams, tables. Part II. 21 p. diagrams, tables.

Report sponsored by the Department of Recreation of the Russell Sage Foundation. Deals largely with the administration and best use of existing facilities, pointing out need for additional facilities.

- QUINCY, MASS.** CITY PLANNING BOARD. Sixteenth annual report for the year ending December 31, 1930. 1931. 15 p. photos., maps and plan (folded).

Primarily concerned with new traffic arteries through Quincy.

- READING, PA., AND REGION.** BERKS COUNTY, PA. COMMUNITY COUNCIL. Reading region reconnaissance survey: basic requirements of a regional plan, 1930. 16 p. maps (one colored), table. (John Nolen, city planner, Hale J. Walker and Justin Hartzog, associates.)

An inventory and diagnosis of this region which borders on the Philadelphia Tri-State District.

- RICHMOND, CALIF.** ARONOVICI, CAROL. Civic center design for Richmond, California. Richmond, Calif., City Planning Commission, November 15, 1930. [10 p.] perspective sketches. (Richard Neutra, and R. M. Schindler, associated architects.)

Expresses new civic consciousness arising from planning program of last ten years.

- RIDGEWOOD, N. J.** PLANNING AND PARK COMMISSION. A plan for the Ridgewood of the future. May 1, 1930. 77 p. map (folded), plans, bird's-eye perspectives, tables (part folded). (Technical Advisory Corporation, consulting engineers.)

Contents: The Ridgewood of today; The Ridgewood of tomorrow; A plan for Ridgewood's future development.

- ROCHESTER, N. Y., AND REGION.** MONROE COUNTY REGIONAL PLANNING BOARD. Second annual report, from January 1 to December 31, 1930. Rochester, 1931. 31 p. photos., maps, charts, tables.

Records the organization and 1930 projects of the Planning Board and an agreement with County Park Commission to cooperate in the consideration of all engineering projects of mutual interest.

- . **PLANNING BOARD.** A major street plan for Rochester, New York. 1929. 104 p. maps, plans, diagrams (part colored); charts, tables. (Harland Bartholomew and Associates, city plan and landscape engineers.)

Of particular importance because of long planning history of Rochester. The first of a series of special studies for comprehensive city plan. To be followed by reports for civic center, transit facilities, railroad lines and terminals, and public recreation facilities.

- . **RAITT, CHARLES B.** A survey of recreational facilities in Rochester, N. Y. June, 1929. 410 p. photos., folded maps, tables.

An exhaustive survey made for the Rochester Bureau of Municipal Research, Inc., at the request of The Council of Social Agencies of Rochester.

- SAN DIEGO, CALIF.** **CITY PLANNING COMMISSION.** A report on a major street plan for the City of San Diego, California. July, 1930. 31 p. map, folded plan, cross sections, diagrams, tables. (Kenneth Gardner, city planning engineer.)

Report embodies results of four years' study of major and secondary thoroughfares, in light of 1929 California Planning Act, starting from Nolen plan of 1926.

- SANTA BARBARA COUNTY, CALIF.** See **MONTECITO, CALIF.**

- SCRANTON, PA.** **TECHNICAL ADVISORY CORPORATION.** Scranton's future and how to provide for it. Report to the City Planning Commission, December, 1929. 16 p.

Brief summary of existing conditions and suggested plan of action.

- UNION COUNTY, N. J.** **UNION COUNTY PARK COMMISSION.** Report for period from July, 1928 to July, 1930. Elizabeth, N. J., 1930. 61 p. photos., maps (one folded), diagrams, charts (part folded), tables. (Olmsted Brothers, consulting landscape architects.)

A well-illustrated record of two years' progress on comprehensive park system.

- WASHINGTON, D. C., AND NATIONAL CAPITAL REGION.** **AMERICAN CIVIC ASSOCIATION, AND THE NATIONAL COUNCIL FOR PROTECTION OF ROAD-SIDE BEAUTY.** Highway entrances to Washington—the Federal City: a survey of existing conditions. Washington, American Nature Association, 1930. 42 p. photos., map.

A popular pamphlet illustrating the desecration of highway beauty by billboards and "hot-dog" stands.

- . **LINDHOLM, S. G.** Experiences with zoning in Washington, D. C., Sept. 1, 1920-Dec. 31, 1929. Washington, Zoning Commission, 1930. 23 p. mimeographed. map, tables.

An explanation of the recently issued revised ordinance, discussing the principal zoning problems of Washington since passage of original ordinance.

- . NATIONAL CAPITAL PARK AND PLANNING COMMISSION. Annual report for the fiscal year ended June 30, 1930. Washington, Government Printing Office, 1930. 79 p. photos., maps and plans, bird's-eye perspectives, cross sections, diagrams, tables (part folded).

With its companion volume, noted below, this brings up to date the history of the important planning developments of the District.

- . ———. Reports and plans, Washington region: supplementary technical data to accompany annual report. Washington, Government Printing Office, 1930. 134 p. maps and plans (part folded).

Of particular interest are the section on platting and subdivision regulation and a housing program for the District of Columbia.

WEST SHORE REGION, PA. See **HARRISBURG, PA., AND REGION.**

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QUARTERLY

VOL. 7

July 1931

No. 3

CITY PLANNING IN SOVIET RUSSIA

By ROBERT WHITTEN

City Planning Consultant, New York City

IN the Union of Socialist Soviet Republics the planning concept is accepted more completely than in any other country. The State Planning Commission is the head of a planning organization that has its roots in every province, region, republic, governmental department, trust, combine, coöperative and collective throughout the Soviet Union.¹ It has at its disposal unusually complete statistical data and research and technical assistance of every kind. Its problem is to work out a general control plan to coördinate the entire industrial and cultural activity of the Union toward the carrying out of a long-term program of industrialization and socialization. Its "annual control figures," after receiving the approval of the all-powerful Political Bureau of the communist party and the formal approval of the Council of People's Commissars, become the goal that actually controls to a greater extent than would seem humanly possible the direction and tempo of the life and work of 160,000,000 people.

The entire area has been divided in a broad way into industrial regions and land utilization zones. A map showing the general location of industries to be constructed under the Five-Year Plan has been prepared and widely distributed and exhibited throughout the Union.

The State Planning Commission does not concern itself with

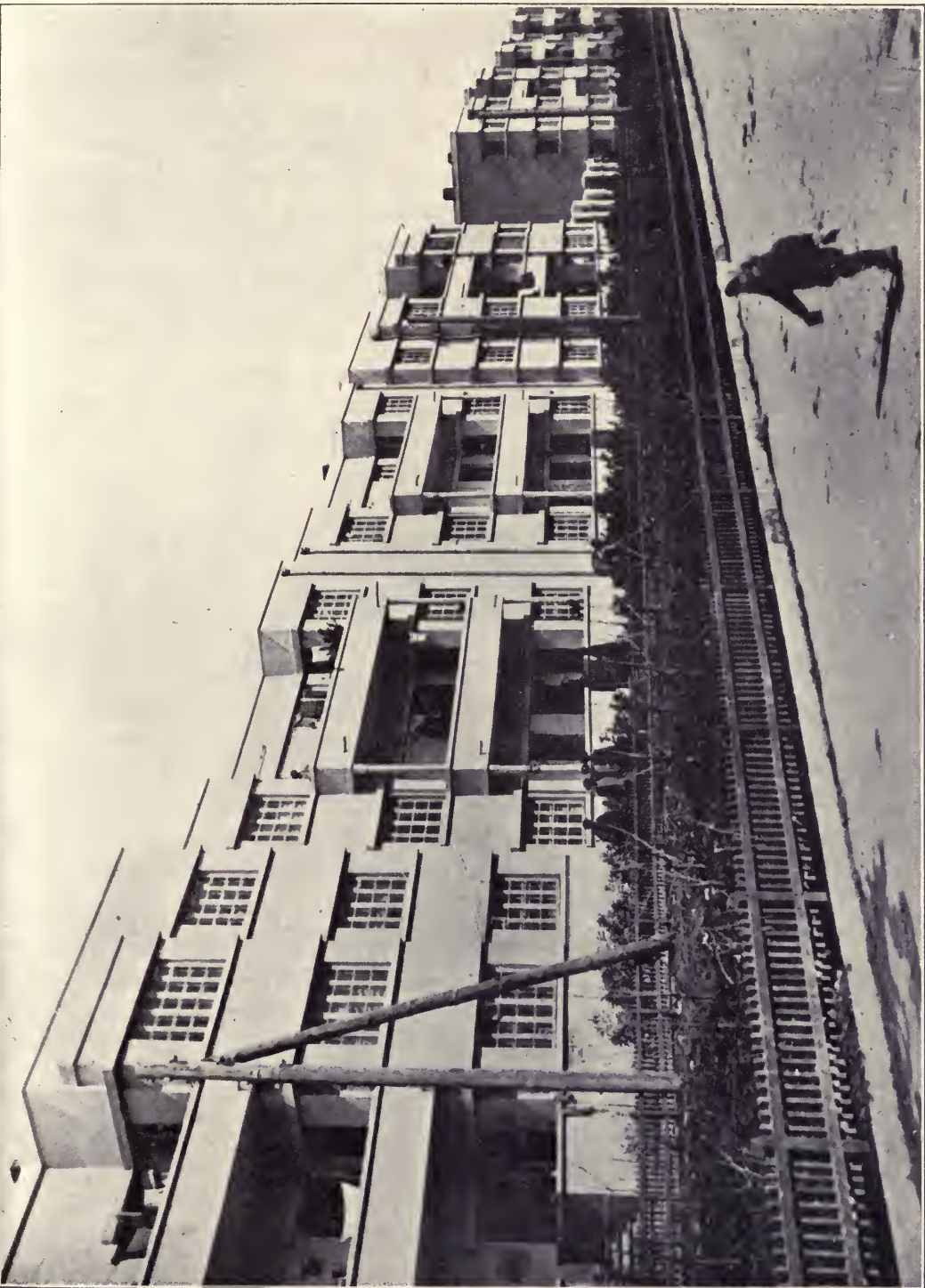
¹"The Economic Life of Soviet Russia" (Calvin B. Hoover) pp. 298-326.

details, methods, or administration. Besides the central or All Union State Planning Commission there are separate planning commissions for each of the federations and republics included in the Soviet Union and for each province and region. Each large trust, combine, or governmental department also has its planning bureau.

With planning a central feature of the Soviet system, city and neighborhood planning, as those terms are known in America, are in general accepted without question. To be sure, in the stress and strain of carrying out the Five-Year Plan of industrialization and collectivization, problems of housing and city reconstruction have been more or less sidetracked. There is, however, a large and well equipped city planning bureau in the Commissariat for Home Affairs. This bureau draws up plans for smaller cities that do not have their own planning bureaus and for new industrial towns. Professor F. N. Semenov with many architects and engineers is busily engaged in preparing schemes for towns and neighborhood units, many of which soon will be under construction.

A number of competitions have been held for plans for industrial towns or workers' villages and several such towns are now under construction. In new developments a park strip or "green belt" is normally provided between an industrial plant and the dwellings or apartments. The minimum width of such green belt has been fixed at 60 meters or 196.8 feet.

Five separate industrial towns are planned for a fifteen-mile stretch along the Volga River on either side of Stalingrad. Each of these new towns is planned for a population of from 50,000 to 75,000. One of the new towns centers at the immense tractor plant that is to have capacity for 50,000 tractors a year. The plant is separated from the apartment houses by a park strip. In July, 1930, while construction was going on and plant and houses were only partly complete, there was evidence of comprehensive planning and indications that the completed town would have many advantages over the typical industrial town. One hundred apartment houses, each with 40 three-room apartments, had been completed and were occupied by some 7000 workers of the tractor plant.



APARTMENTS IN NEW INDUSTRIAL TOWN BUILT FOR OIL WORKERS OF BAKU

In Russia it is assumed that all housing and planning will keep constantly in mind the needs of the socialist state. It is believed that the town plan can help to "build socialism." There is a feeling that the private, detached dwelling tends toward individualism and private ownership as against social solidarity. The individual dwelling is therefore taboo in current housing programs.

The Bolsheviki believe that every able-bodied adult should labor. Economic conditions and earnings are such as to force the wife to contribute to the support of the family. It follows, therefore, that housing and town planning should aim to minimize woman's work in connection with housekeeping and the care of children. Moreover, one theory is that home duties and cares waste time that should be employed in obtaining socially useful culture or in taking part in useful civic and party work. A good Bolshevik is one who is busy seven or eight hours a day at his job and eight or nine hours a day at some form of social work or of preparation for social work.

Each factory and farm collective where women are employed has its nursery where the mothers may leave their babies during working hours. Sometimes a nursery is attached to a group of apartment houses. Kindergartens, elementary schools, and supervised playgrounds are also part of the equipment of the model neighborhood units.

Another means of reducing housekeeping labor is the factory kitchen applying mass production methods to food preparation. Thousands of meals are served daily in a common dining room or taken in containers to individual homes. The Bolsheviki are experimenting with these and other methods of reducing housework, destroying bourgeois tastes, and building communism.

Soviet planners and theorists are busy working out methods by which the city, town, and neighborhood shall function efficiently in a socialist state. They are ready to try any experiment in town building, no matter how radical. They feel that the model socialist town will be quite different in construction and function from the model town developed under an individualistic economy. In this they are doubtless quite right. The vice chairman of the State Planning Commission, G. T. Grinko, writes: "We are on the eve

of great scientific works and great social movements linked up with the determination of the character and type of socialist cities."¹ Indeed he goes further and says: "A really rationally organized city must be a socialist city."

In the Ural industrial region an enormous iron and steel plant with a capacity for 3,000,000 tons a year is under construction. The plant will employ 15,000 workers. Homes and all necessary facilities and utilities for a population of 25,000 are also under



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APARTMENT-HOUSE SUPER-BLOCK, NEAR NIJNY-NOVGOROD
Characteristic new housing in "The First Model Communist City,"
being constructed by American engineers

construction. The entire project is estimated to cost 800,000,000 rubles. In this, as in all model-town plans of the Soviets, three- or four-story apartment houses, arranged in large super-blocks with liberal allowances of open space for light and recreation and many community features, are planned.

Near Nijny-Novgorod, an automobile factory with a yearly capacity for 140,000 cars, together with a workers' city for a population of 50,000, is being constructed by the Austin Company, construction engineers of Cleveland, Ohio. It is called "The First Model Communist City." The new town is described by H. R. Knickerbocker, as a result of a visit in November, 1930, as follows:

¹"The Five-Year Plan of the Soviet Union" (G. T. Grinko) p. 232.

Beyond the plant lies the site of the new city, ideally situated near the river, with parks stretching down to its banks, and designed to provide the maximum of comfort and convenience. The blocks of apartment houses are arranged in such a manner that to go from any part of the dwelling center to any other part, or thence to the restaurant and schools, it will not be necessary to cross a street. This was done for the children.

Besides the dwellings there are being erected a "House of the Soviets," a "Palace of Culture," a museum, a polyclinic and hospital, hotel, shops, garbage disposal plant, bathing-beach, bakery, laundry, garage, railroad station, cold-storage plant, slaughter house, sport stadium, police and fire stations, a huge factory kitchen, schools and a crematorium. Within the housing group are communal clubs, nurseries and a kindergarten.

Of all this there have so far been completed two rows of apartment blocks. By December, 1931, the city is supposed to be complete for 25,000 inhabitants, and by December, 1932, it must be ready to accommodate 50,000.¹

At Zaporoshie a new industrial city is being built near the Dnieprostroy power project. Housing for an expected population of 50,000 is being provided. A green belt two kilometers wide separates the houses from the metallurgical and chemical plants now under construction. In one large super-block a so-called "house-combine" was being built in the summer of 1930. In addition to its many apartments it was designed to have a club, movies, theater, gymnasium, dining rooms, consumers' coöperatives, and other community services and facilities.

At Dnieprostroy where the great power dam is being constructed a well planned town has been built to house the 5000 construction workers. Attractive detached houses have been built for the American engineers who under Colonel Hugh Cooper are supervising the project.

The state farms and the farm collectives are creating problems of village and town planning. A large state farm may require a town of five to fifteen thousand people. A single collective may include the families of several villages. How will these new towns be planned? Much thought is being given to this problem. Some contend that the solution will be the building of many agricultural towns of five to twenty-five thousand persons. These towns, beside being centers of mechanized farming for the surrounding region, will have many small industries for the processing of agri-

¹"The Red Trade Menace" (H. R. Knickerbocker; Dodd, Mead and Company) pp. 35-36.

cultural products. Be this as it may, with the success of collective farming the present villages will doubtless in time be rather completely reconstructed. The present housing of the peasants is primitive and totally inadequate. Will the rehousing be in cottages or apartment houses? Socialized agriculture requires the building of central barns, garages, repair shops, creameries, schools, nurseries, and community buildings.



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Houses for American Engineers at Dnieprostroy

There are 26,000,000 peasant families representing a total farm population of about 127,000,000. Present agricultural methods are of the most primitive type. The sickle, the scythe, the flail, and the wooden plow are typical implements of the poorer peasants. As a contrast, on the state farms and largest collectives, the tractor and harvester-combine are typical of the trend toward complete mechanization. But even with the present primitive methods of farming there is a great oversupply of peasant labor. Labor-saving machinery is only economic if it results in a net saving in cost of production. The saving in labor cost must be suffi-

cient to pay operating cost and depreciation on the tractors, combines, and other machines. The mechanized collective farm should be able to operate with not more than half the number of workers formerly required, if it is to be economically successful.

With the expected complete collectivization and mechanization of the 26,000,000 peasant farms, what will become of the some 30,000,000 workers who will no longer be needed on the farms? Will it result in unprecedented "technological unemployment?" Of course complete mechanization of agriculture will be a matter of many years. While collectivization is now proceeding very rapidly, mechanization must be slow as there is neither money nor factory capacity to provide the necessary machines. Commissar of Agriculture, Y. A. Yakovlev, reported over 9,000,000 families in collectives in March, 1931. This is over 34 per cent of the total number of peasant families.

Of course part of this probable surplus of some 30,000,000 workers will be required in the factories to turn out tractors, harvester-combines, and other agricultural machinery. A part will be needed to manufacture the goods of all kinds demanded by the higher standard of living of the peasants on the collectivized farms. Many workers will be needed for increased transportation, distribution, and administration services. Still more will be needed in the new industries of all kinds that the present and succeeding Five-Year Plans will call into being. At present there is an appalling scarcity in all consumers' goods. Many additional workers will be needed to make up this difference. Lastly, some millions of workers will be needed to practically rebuild the present cities, towns, and villages and create suitable housing in the course of the next twenty years for some 200,000,000 people.

All this should mean a really revolutionary growth in urban population,—possibly even a doubling of urban population in ten or twelve years and a trebling in twenty years. In the last few years while population as a whole has been increasing at the fairly rapid rate of 2.1 per cent a year, urban population has increased more than 5 per cent a year. In the United States during the period 1920 to 1930 total population increased 1.5 per cent a year while urban population increased 2.4 per cent a year. The rate of

growth of urban population is now more than twice as high in the Soviet Union as in the United States and the cumulative effect of rapid industrialization and collectivization seems certain to result in accelerated urban growth. Even the present rate of urban increase, continued for a period of less than twenty-five years, would treble the urban population, or approximately the same trebling of urban population would be achieved by an increase of 7 to 8 per cent per year for the next eight to twelve years and by a similar increase of 4 per cent per year for the succeeding eight to twelve years.

Of the present population of 160,000,000, about 33,000,000 (about 20 per cent) live in urban communities. With a possible increase of the urban population to 100,000,000 within a generation, city planning assumes a truly tremendous importance. Will the science and art of planning prove equal to the task? Will it be economically possible in the stress and strain of such unparalleled growth to find the labor and materials to build in accordance with well considered plans; or will it be necessary to sacrifice quality for quantity and build the cheapest instead of the best? Rather than the latter, would it not be wiser to slow down farm mechanization to a pace consistent with good housing and city building? Of course complete mechanization of agriculture is not economically feasible in a short term of years, and this may furnish an automatic check to an overrapid exodus to the cities of farm labor displaced by the tractor and the harvester-combine. A "planned economy" should secure a well balanced growth. Is there not some danger that too rapid mechanization of the farm may result in injury to the entire economic and social structure?

The Moscow Soviet has a large and well equipped city planning bureau under the direction of Sergius Gorney, its chief engineer. Maps and data of all kinds have been collected and much study has been given to the formulation of principles and factors (economic, social, and political) that should govern the development of a comprehensive plan for the rebuilding and expansion of Moscow. Moscow now has a population estimated at three million. There has been a doubling of the population in ten years. It has been tentatively decided to prepare a plan based on a

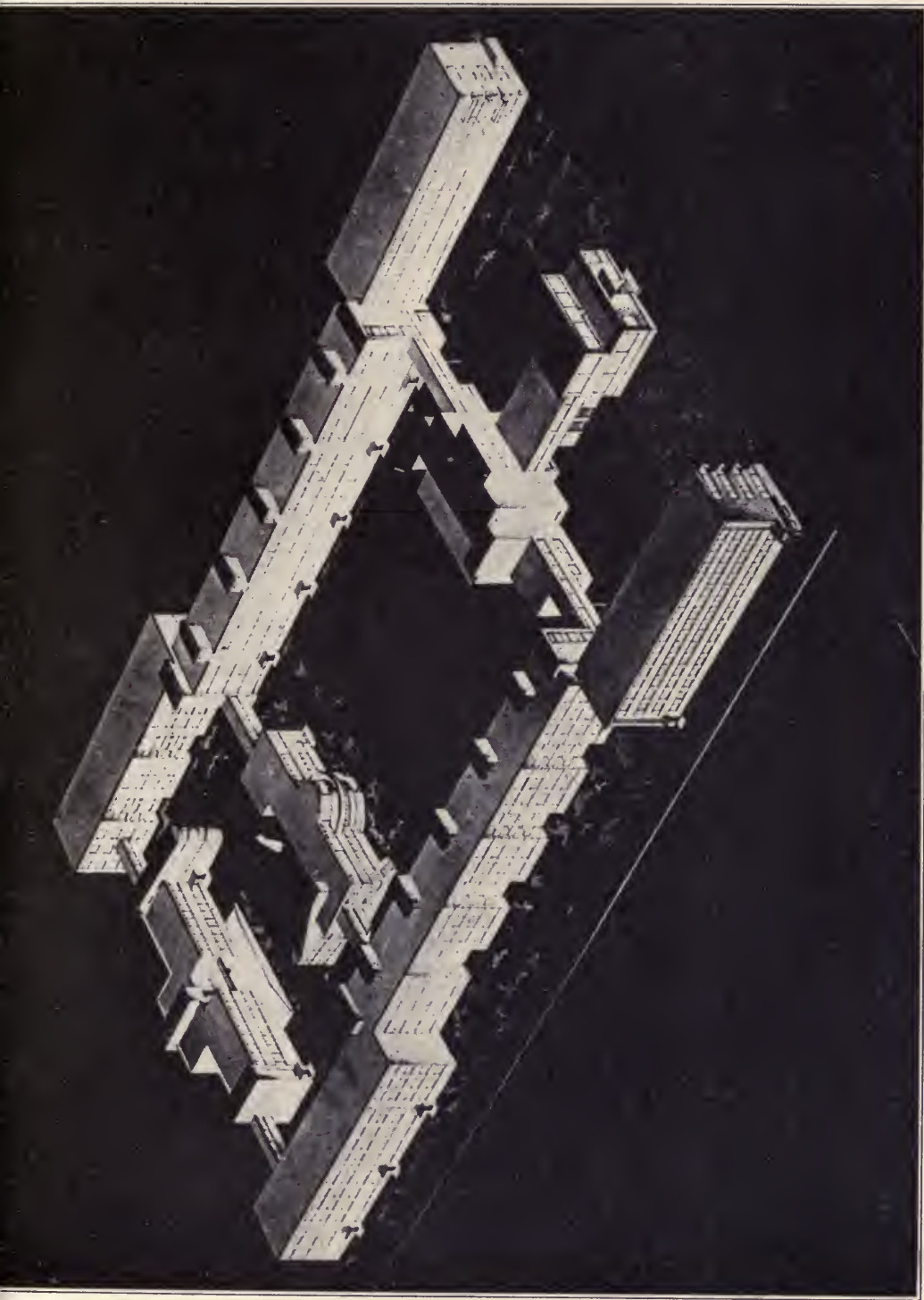
definite limit of population in the Moscow region within a radius of 35 kilometers to a total of 6,500,000. It has been estimated that the population will reach the above limit in 1942. It had always seemed to the writer that a definite limit on city or regional growth was impractical and perhaps undesirable. However, in a socialist state with a planned economy, the fixing of fairly definite limits to the size of industries and of population of a given region may be both economically and socially practical and desirable.

Another interesting tentative decision of the planning bureau is that not less than 50 per cent of the entire area of the Moscow region (within the 35-kilometer radius) shall be retained permanently for agriculture and parks. As all land has been nationalized the setting aside of open-development areas presents no serious difficulty.

The Moscow planning bureau is giving careful consideration to the principles and standards to be applied in the planning of the neighborhood unit or super-block as it is also called. How large in area and population should each unit be? What cultural and service functions and institutions should be combined with each unit? How should the unit be related to the major street and transportation system? How much area should be set aside for small parks and recreation? How should the units be arranged in larger groups? How should the residential areas be related to areas of work and to the chief recreational areas?

The Moscow bureau assumes that there will be a high measure of socialization of neighborhood life,—nursery, kindergarten, supervised play-yard, elementary school, high school, facilities for adult culture and education, common dining room, factory, kitchen, laundry, medical care, etc. In addition to the usual number of hospitals serving larger areas, it is planned to have in each neighborhood unit or super-block a “prophylactorium” for the prevention of disease.

For the purposes of the plan, the Moscow bureau has estimated that the total population of 6,500,000 will be divided approximately as follows:



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MODEL OF A "HOUSE-COMBINE" AND SUPER-BLOCK
This group is now under construction at a new industrial city near Zaporoshie

Industrial workers	36 per cent
Civil and commercial employees	22 " "
Adults over 55 years of age	10 " "
Children 0-1 year	3 " "
" 2-4 years	8 " "
" 5-16 years	21 " "
	100 " "

These control figures will be used in fixing quantitatively the requirements for schools, playgrounds, nurseries, water, light, gas, fuel, food storage, retail stores, industrial housing, hospitals, telephone service, rapid transit, express highways, parks, etc.

In the Moscow region the light industries now have 25 per cent of the total number of workers employed in industry, and the heavy industries 75 per cent. With the extensive industrialization planned it is expected that these relations will be changed to 40 per cent for light industry and 60 per cent for heavy industry. On this basis it is estimated that the plan should provide a total of 45,000 acres of land for heavy industry and 10,000 acres for light industry. This will mean a gross land area of about 1400 square feet for each worker in heavy industry and of 460 square feet per worker in light industry. It is also estimated that this industry will create an aggregate of 125,000,000 tons of freight annually to be transported. This factor will determine the planning of facilities for water, rail, and truck transport.

There is a tremendous advantage and thrill in being able to plan a city complete for a predetermined population, especially if it can be assumed that the city will actually be completed within such a short period as twelve or twenty-five years. In the case of Moscow, a metropolis of 6,500,000 people should be completed in about twelve years, if the estimates of the plan bureau are fulfilled. Moscow has been growing rapidly and unless industrial collapse intervenes, the expected phenomenal growth may take place,—if not in twelve years, perhaps in twenty years. But whether such rapid growth of population can be accompanied by the model type of community building envisaged by the planning bureau is more

doubtful. How can the money, labor, and materials be provided for building such a huge metropolis in such a short period? The Bolsheviki have already accomplished the impossible and perhaps they are equal to this herculean task.

If the Soviet experiment is even moderately successful, the Soviet town planner has a truly wonderful opportunity for creative work. Some of his opportunities and advantages are:

(a) With the nationalization of the land there is nothing to prevent its being devoted to its most socially appropriate use. A new town is not limited in the use of land. An old town may expand in accordance with a well considered plan. There are no problems of land speculation or condemnation. There is little difficulty in setting aside a park belt or an agricultural belt or in securing compliance with a proposed street plan or zoning plan.

(b) With practically all building construction, housing developments, industries, public utilities, institutions, offices, and businesses either under government or semi-government ownership and control, the problem of carrying out the town plan is largely that of securing a degree of coöperation between the numerous government and semi-government departments and offices so that all construction may be coördinated and fitted into the town plan. Such complete coöperation and coördination are no small job even under socialism, but it is not the utterly hopeless task that it is under an ultra-individualistic system.

(c) As a result of the policy of rapid industrialization and especially of the development on a large scale of the basic heavy industries, many new towns and cities are either under construction or definitely decided upon. In most cases these new communities are being very completely planned.

(d) The rapid growth of the existing cities and the probable future increase in the standard of living for the great mass of the population, combined with the urge to apply socialist theories to community building, should lead to a rather complete rebuilding of the residential areas of the present cities and towns.

At present the chief obstacles to thorough and efficient planning are the speed with which projects are undertaken, the great

number of projects that must be planned in a short time, the limited number of skilled planners, and, greatest of all, the limited supplies of money, of labor, and of materials. Everything is now subordinated to the success of the Five-Year Plan. This is concerned primarily with the heavy basic industries. While good housing in connection with some industries is being provided, the rehousing and rebuilding of present cities do not keep pace with present growth. Housing conditions are admittedly appalling.

Soviet Russia under the dictatorship of the proletariat and the leadership of Stalin is actually devoting to new capital investment from 17 to 30 per cent of the national income.¹ For an industrially backward country this is a truly herculean accomplishment. It is being brought about with much voluntary, involuntary, and forced sacrifice on the part of the Russian people: voluntary for the most part in so far as the mass of the manual workers is concerned, involuntary in large part in the case of other employees and peasants, and forced with much attendant suffering on the part of a comparatively small percentage of declassed persons and kulaks. The desired result is a greatly increased national income and a resulting higher standard of living for all the workers. This will be the outcome unless the morale of the people breaks under the long continued strain or unless economic collapse intervenes. Neither a complete break in morale nor a complete economic collapse seems probable; but a slowing down of the tempo of industrialization and farm mechanization seems inevitable.

It is to be hoped, however, that a constantly increasing national income made possible by present and future Five-Year Plans will bring to fruition the plans and dreams of Bolshevik idealists for the building of the model socialist city. The great danger is that in the present period of rapid urban growth with little money to spare for city building and housing, development of the wrong kind and in the wrong place will so fix the lines of city growth that a truly exceptional opportunity for outstanding achievement in city building will be lost.

¹"The Economic Life of Soviet Russia" (Calvin B. Hoover) p. 53. By new capital investment is meant net additions to the capital investment of the nation after making due allowance for depreciation in existing capital investment.

HOW TO MAKE A CITY PLAN

By HAROLD M. LEWIS

Engineer, Regional Plan of New York and Its Environs

THE first step in preparing a city plan is to determine the definition and purpose of a city plan. There are many definitions of city planning. One of the briefest is that used by the late Nelson P. Lewis, for many years chief engineer of the Board of Estimate and Apportionment of New York City. He said, "City planning is simply the exercise of such foresight as will promote the orderly and sightly development of a city and its environs along rational lines with due regard for health, amenity and convenience and for its commercial and industrial advancement." A still briefer definition is the legal one used by Mr. Edward M. Bassett. He says that both a city and regional plan can be defined as "the determination of land areas stamped with definite characters by law," and points out that the community or region establishes its own plan through its legislative body or bodies. This is true of the legally adopted plan which will have positive control over future growth, but it must be preceded by studies of the nature indicated in the first definition.

City planning is both a science and an art. The preparation of a plan requires the coöperation of the engineer, the architect, and the landscape architect, and must be built upon a firm legal and financial basis. A city is a growing organism. If not growing appreciably in size, it is at least changing in character through the replacement of antiquated structures with modern facilities. A plan must, therefore, be elastic. Fitting a plan to an existing city is somewhat comparable to fitting to the growing boy a suit of clothes which must last him for several years. Above all, a plan must be practical if it is to be successfully carried out. It should not call for any tremendous immediate financial outlay. It should be designed so that its various elements can be progressively developed.

GROWTH IN THE SCOPE OF CITY PLANS

The art of city planning has been practiced for many centuries. The ancient cities of the Greeks and Romans, as well as Angkor and other lost cities of Asia, were laid out on principles of design quite similar to those still in use, but the ideals back of these earlier plans were quite different from those held by modern city planners. The older towns were generally centered about a palace or place of worship and were designed for the convenience of the ruling classes, with little or no consideration for the remainder of the population.

Many of the early city planning efforts in the United States were based upon a desire to create a "city beautiful." The most prominent feature was generally a civic center, and many such plans did not extend far beyond the immediate vicinity of this center. Such plans were lacking in practicality and failed to arouse general interest, so that, in many cases, they were filed in libraries and pigeonholes without having led to real results.

The modern comprehensive city plan deals with communication, land uses, location of public buildings, related problems, and the proper architectural treatment and coördination of the whole. Efficiency, beauty, and healthfulness must all be combined.

SURVEY OF EXISTING CONDITIONS

After we have a fair idea of the aims and purposes of a city plan and are ready to apply these to a particular city, the next step is to obtain a comprehensive picture of existing physical conditions in and around that city. That is, we must get intimately acquainted with our city both in its organic structure and in its method of functioning. The major part of such physical survey material is of the type that can be placed upon general city maps. These would show such visible features as geography and topography; existing communication facilities by highway, rail, and water; the location of public buildings; principal classifications of land use, including public parks and parkways and such semipublic open spaces as cemeteries, airports, large institutional properties,

and golf and country clubs. The maps should show also those invisible features established by law, such as political boundaries and pierhead and bulkhead lines.

This material, collected together on a series of maps, preferably at the same scale, will give a visible picture of the present city and an indication of its future potentialities.

In addition, the city planner should attempt to obtain a mental picture of the spirit, ideals, and aims of the city. Every live community has a soul. Some cities are primarily the centers of port and business activities; others are focused around a few predominating industries; others may be the centers of large agricultural regions; and still others may be primarily residential satellites of a neighboring metropolis. The type of city plan required for each of these will necessarily be different.

ESSENTIAL STUDIES AS A BASIS FOR THE PLAN

Before the various parts of the city plan can be developed a series of basic studies must be made. Facts and figures must be treated with care. It has been said that a good statistician can prove almost anything from figures. The statistician's real job is to find the truth from his figures. Likewise, the efficient city planner's task is to draw true conclusions from the facts at hand. This is much more than a mathematical process and requires the application of judgment based on long experience. When facts are correctly analyzed and clearly presented it should be easy to convince the layman of the necessity of important projects.

Let us imagine that we are now ready to collect and marshal the facts related to the planning of a particular community. The following are some of the major studies:

Population Study. Many of a city's requirements are directly proportional to population. It is therefore essential that we know not only the present total population and its distribution but also that which may be found within our city after the twenty-five years or more for which we wish to plan. Present or past population information can be obtained from the published reports of the United States Census Bureau. More detailed data by election districts are supplied by the Bureau at cost.

Distribution of population is generally shown by "dot maps," on which a dot represents a certain number of persons. One hundred people to the dot gives an accurate picture for larger cities, while for smaller ones each dot should represent fifty or twenty-five persons. For a study of past trends in population distribution a series of density maps, each one representing conditions at a different date, is very useful. In making these, ranges of densities should be selected, each of which would be represented by a distinctive symbol of hatching, using the heavier hatchings for the higher densities.

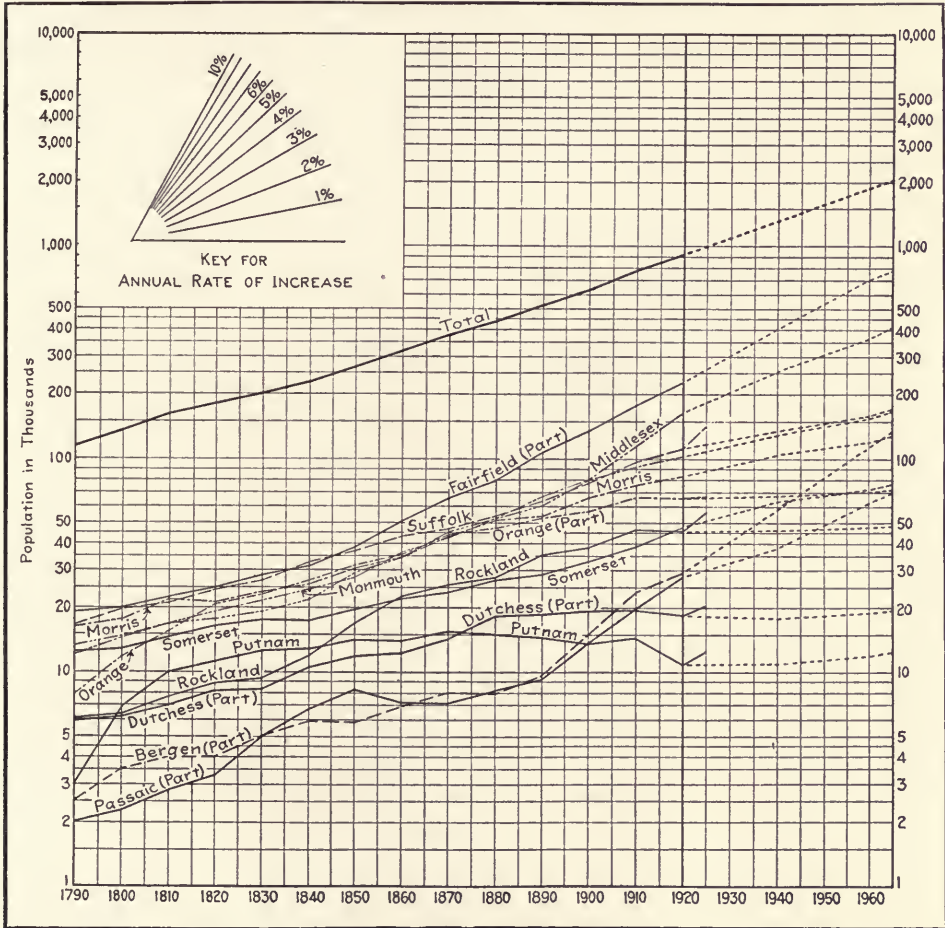
The estimate of future population is generally determined graphically by plotting past records (computed for present boundaries if there has been any change in the city boundaries) and extending the curve into the future. If such records are plotted on semilogarithmic paper, a uniform rate of growth appears as a straight line, the slope of which increases with the rate. Past trends may appear very distinctly on such a scale and can be readily projected to give sufficiently accurate forecasts. If the city growth has become irregular due to certain economic conditions, the estimate of future population is more difficult and needs more mathematical analyses of changes in rate of growth, birth rate, death rate, etc.

A rule of thumb which has sometimes been used is to plan any city for double its present population. For some rapidly growing cities such an estimate would be much too low, and for other stabilized communities it would be too high; more careful estimates are well justified.

The population study should also include some analysis of the activities of workers, percentage of different age groups, percentage groups classified by incomes, etc. Such information is readily available in the United States Census Reports and has a bearing upon such features of the city plan as the provision of playgrounds, the distribution of residence areas, and the feasibility of financing new improvements.

Analysis of Vehicular Traffic. Data on the volume of vehicular traffic are often available through the various state highway departments. In order properly to determine the roadway require-

ments for a particular city, additional traffic counts will be required. Unless such counts are made under uniform conditions, the results may be very misleading. The amount of traffic varies



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POPULATION ESTIMATES

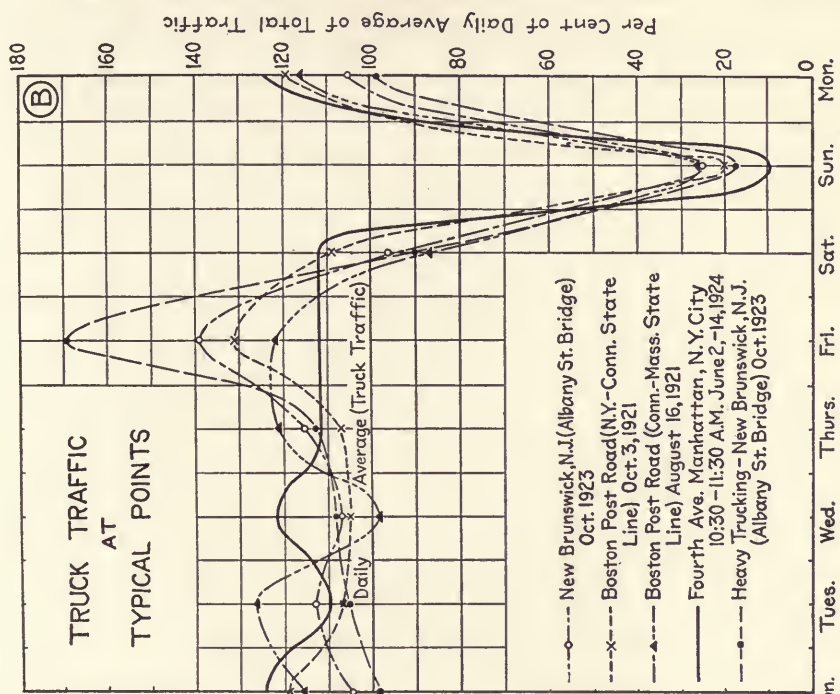
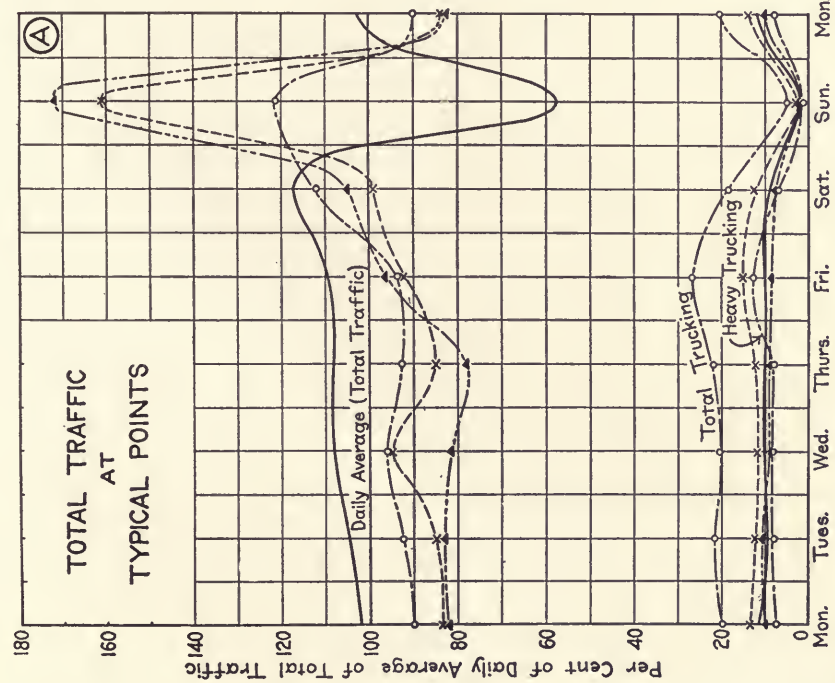
These estimates were prepared for the outlying parts of the New York region by the Regional Plan Committee

greatly not only within the hours of the day but also on the days of the week and in the different seasons of the year. This makes impossible a direct comparison of counts made at different times.

Generally a series of counts made at principal traffic points over a ten- or twelve-hour period is sufficient to give a true picture of the distribution of vehicular traffic. It has been found that

average week-day conditions will generally be found on Tuesdays, Wednesdays, or Thursdays. If it is not feasible to make all the counts on the same day, they can be made on these days within either the same week or within a period of two or three weeks and still give a comparable picture. If the picture of maximum traffic on the edges of a community or in suburban areas is required, the best time to take such counts is on week-end periods during the summer months. The absolute maximum at such points in the larger cities generally occurs at the end of a three-day holiday, but it is questionable whether it is practicable to design our highway systems so as to take care of such exceptional loads without delays to the motorist.

In order to design properly new highway connections and bypass routes we must know something about the routing of traffic in addition to the distribution of its volume. This information can be obtained from origin and destination counts. If the traffic is not too heavy it should be possible to get such information from all drivers passing certain selected points. On very busy thoroughfares it is not practical to stop all vehicles and get such information. An alternative is to hand out post cards, to be filled in by each driver and returned. The percentage of returns from such a procedure is likely to be small. I believe a better method is to select points where traffic is periodically stopped for cross traffic and to question as many as possible of the drivers of standing cars while traffic is so stopped. At the same points the total number of vehicles passing during the period should be counted. In this way a fair sample of traffic at each point is obtained and when the results are plotted graphically they should give a sufficiently accurate picture of the conditions. Assuming that the total vehicles interviewed are truly representative of the total vehicles passing, the percentage of the latter which come from or go to any particular location can be determined. This method was used by the Regional Plan of New York and Its Environs in analyzing the origin and destination of traffic at certain busy points in the central parts of New York City. The percentage of total traffic for which origin and destination data were obtained varied from 2.2 to 11.4. In the average city these percentages could be higher.



Railroad Requirements. For a small city the determination of trunk-line railroad requirements should not be difficult. The main-line trackage will probably be sufficient for many years to come and the principal questions involved are the suitability of passenger and freight terminals and the provision of new belt lines or connections to serve existing or future industrial areas.

In a metropolitan center where there is an appreciable number of railroad commuters the problem is more involved, and careful analyses should be made of the past trends and probable future trends in commuter traffic. Electrification of terminals becomes of great importance and there may be justification for the establishment of separate terminals to handle the commuters or of new distributing lines to disperse them through the main business areas.

If a community serves as a port, careful studies must be made of the routing of railroad and steamship freight and the methods of interchange. The provision of an adequate belt-line railroad to serve jointly for interchange between different sections of the port and for the by-passing of through freight may be of tremendous importance.

The electrification of railroads may bring about changes in the use of adjoining land. The best example of this is the development which has taken place in the vicinity of the Grand Central Terminal in New York City, following the completion of the electrification of that station in 1913 at a total cost of about \$60,000,000. The City of Cleveland, Ohio, has just completed a somewhat similar project in its new Union Terminal. The rebuilding on the adjoining areas is well under way and will probably be followed by increased activity within the next ten or fifteen years.

Recreational Needs. Before laying out new parks and playgrounds a careful analysis must be made of the adequacy of present provisions. The probable growth and distribution of population have an important bearing upon the suitability of sites for future park areas. New parks will not be justified in areas which are likely to be taken over for industry, but will be most needed where they are readily accessible to centers of residence.

Economic and Industrial Survey. For small communities a city planner would not be justified in making detailed analysis of

the location and trends of the various types of industrial activity. The Regional Survey of New York and Its Environs included the most comprehensive survey of economic and industrial conditions that has been made for any large community. Ten different major industries were selected and careful studies were made of each and published in a series of monographs. Reports on the financial district and on the retail shopping district supplemented this series of surveys. These reports have been helpful in analyzing the functions of the New York metropolitan region and particularly in determining what degree of industrial decentralization might take place. The data used were obtained from the original unpublished records of the Bureau of the Census.

ELEMENTS OF THE CITY PLAN

Time will permit of only a brief description of the principal elements of the city plan, which will naturally follow the basic studies just described. The plan is built up from a group of separate plans, each dealing with one of the major city functions.

Highway Plan. The highway plan deals primarily with a system of main traffic thoroughfares designed to provide for the movement of vehicles between the city and its neighboring communities and (a point that is sometimes neglected) between the different parts of the city without the necessity of passing through the main business center. A by-pass route for through traffic which would otherwise come directly through the city should be provided. It is now generally admitted that such by-pass routes are essential to avoid serious congestion and interference with business in established business centers.

The traffic thoroughfares are designed in number and width to take care of the estimated future traffic. These thoroughfares will form the framework upon which is fitted the secondary street system of the city. In areas where this secondary street system is not already established, it may be so arranged as to encourage community development and provide residential streets reserved for local traffic.

It is desirable to have main traffic thoroughfares paralleled by one or two streets over which traffic can be routed if the main

thoroughfare must be closed for repairs or other reasons. Such parallel routes make it possible to segregate different types of vehicular traffic. For example, motor trucks might be excluded from one of the streets or one might be developed as a main business street with trolley or motor-bus lines and the other used largely for long-haul traffic.

Transportation Plan. The transportation plan should include a comprehensive railroad plan, which will show any new routes or necessary arrangement for unification of terminals or the addition



Site of Grand Central Terminal, New York—1906

of new terminals for freight or passenger uses. The larger the community, the more important is this part of the city plan which, as already pointed out, might include proposals for separate facilities for railroad commuters.

Another part of the transportation plan is a comprehensive system of local transit facilities with coördinated routes for trolleys and motor busses. If the size of the city justifies it, a rapid transit system coördinated with other means for local transit is a most important part of this plan.

Park and Parkway Plan. The park and parkway plan should show a complete system of parks, parkways, and connecting boule-

wards. Most of the park area can be taken from lands that are not suitable for economical building development but which would soon lose their natural beauties unless safeguarded by public ownership. A well designed park system is one of the best assets any community can have.

Location of Public Buildings. If a well established civic center already exists, a plan should be prepared for any necessary future expansion. Subcenters of community activities may be established in the secondary centers of the city. Advantage should be taken



Park Avenue, New York, above Electrified Tracks—1925

of prominent sites where vistas can be obtained from approaching streets, for the location of both public and semipublic buildings. Waterfront sites possess special advantages. Many of our cities have appreciated the possibilities of their waterfronts, while others still treat them as back yards and unsightly dumps.

Zoning. A comprehensive zoning plan regulating the use of land and the bulk of buildings, through height and area restrictions, is essential for the stabilization of any city plan. The zoning plan is often prepared by a separate commission, but it and the other divisions of the city plan are closely related and supplement each other.

Main Drainage and Sewerage Plan. The preparation of detailed plans for drainage and sewage collection and disposal is one of the functions of the city engineer. The main drainage plans, however, are closely related to the street plan which must provide suitable routes for trunk sewers. The location of sewage treatment plants should also be taken into consideration in the zoning plan. Trunk sewers have been located to great advantage along parkway routes where the latter follow natural watercourses. It is obvious, therefore, that general recommendations in regard to these problems could logically be made a part of the city plan.

Coordination of All Studies. Before adopting final plans for any of the above elements of the city plan it is essential that the city planner coördinate all of them into a comprehensive whole. This is one of the most important steps in the preparation of the city plan. Only if this is carefully and wisely done can the success of the whole plan be assured.

HIGHWAY CONGESTION AND HISTORY

If we do not reform our main roads we shall handicap ourselves against our competitors. If we do not broaden and change our town streets we may rapidly strangle and atrophy our most vital centres of commerce. The general rule in history is that a city having reached its highest point of wealth becomes congested, refuses to accept its only remedy, and passes on from congestion to decay.

—HILAIRE BELLOC in "*The Road*"

SOME ASPECTS OF PORT AND CITY PLANNING

By ROY S. MACELWEE
Consulting Engineer

THE city plan of any community located on a waterfront, even if it be a small river, frequently allots a considerable portion of the waterfront for navigation. This phase of city planning requires special study.

One of the fundamental requirements of a port is adequate transportation by rail, highway, and air. A careful study of railroad right of ways and their unification in a belt line, or harbor railway, is desirable in order that the port may be completely connected with the hinterland by railroad, and that freight may be shipped from a point on any railroad to any shipside point in the harbor at a uniform flat switching rate.

Likewise, the harbor streets which frequently accommodate large volumes of motor-truck freight must be carefully correlated with the major street system in order to by-pass the more congested parts of the city and afford quick and direct access between any wharf and the highways tributary to the port.

Air transportation for mail, passengers, and express freight is growing rapidly. Waterfront communities find that in addition to the usual airport for land ships, it is necessary to provide a landing place for flying boats. In an area such as the Great Lakes region, the flying boat is growing in importance as an element in transportation. Obviously an airport should be located as close to the city as possible, and we sometimes find airport enthusiasts demanding that the airport be located where the commercial port should be. The commercial port (that portion of the water terminal area set aside for general commerce) is ordinarily located as close to the business section as possible. Large-bulk terminals, such as petroleum-products depots, and bulk-handling facilities for such commodities as ore, coal, sand, and gravel are the next less intensive development. There may be an opportunity to make a break in

this second zone for airports. A seaplane airport will not be given a Grade "A" certificate by the Department of Commerce if the flying boats must land in water subject to heavy shipping. However, it may be entirely possible to locate the terminal itself and the haul-out ramp and hangars close to the business section away from the main channels, and have the flying boats land at some distance and taxi through the more congested portion of the harbor.

INDUSTRIAL PORTS

The industrial port area is of increasing importance, for we are in a period of industrial decentralization. Rising freight rates have made the cost of delivering manufactured goods to the market an important item. There is a tendency for large industrial organizations, as well as independent plants, to locate at some point where both rail and water transportation are available, in order that advantage may be taken of the movement of the lower-grade prime materials for manufacture by steamship, boat, or barge, and the distribution of the finished products by railroad. Port industries divide into two groups:

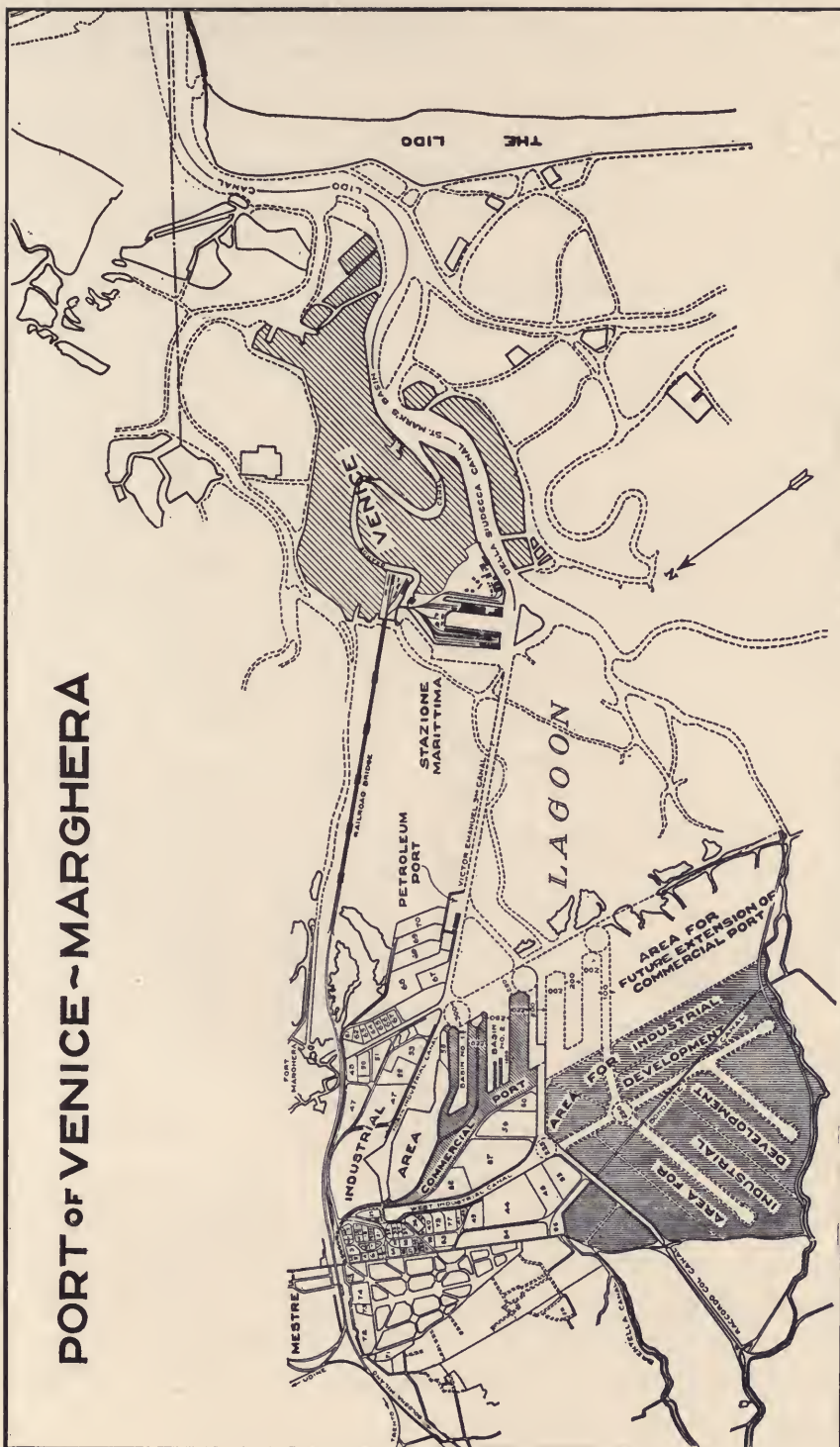
Class "A" Industries—those of lighter manufacture which are not noise- or odor-producing.

Class "B" Industries—steel mills, oil refineries, fertilizer plants, cement works, and other heavy industries.

Class "A" industries may be located close to the commercial portion of the harbor. Perhaps the loft manufacturing establishments, adjacent to the Bush Terminal in South Brooklyn, are the best known examples of this type of industry in an otherwise restricted zone. The location of Class "B" industries should be made with due consideration of the direction of prevailing winds in reference to the residential section of the town. These industries require large blocks of fairly low-value land accessible for the type of shipping upon which the industry depends for its existence.

The most striking industrial harbor development at the present time is that of Venice-Marghera across the lagoons from the city

PORT OF VENICE-MARGHERA



Courtesy of Professor Enrico Coen-Caglie, Director, Venice-Marghera Canal

of the Doges. The City of Venice realized that it could not subsist upon the revenue from glass-bead blowers and tourists alone. However, this Pearl of the Adriatic, perhaps the most picturesque, beautiful, and unique city in the world, could not afford to have one of its stones touched by modern industrialism. It therefore decided to build a ship canal, about four miles long, across the lagoons to the low-lying marshes near the town of Marghera on the mainland, and to build a harbor for industries and commerce, tapping the railroad at Mestre to furnish the necessary rail sidings, and building a lateral industrial shipping canal to provide the industrial areas with the requisite water siding. The cost of improvements was distributed over the land. The area was developed with revetments along the canal, filled to grade, provided with waterfront streets, extra large water mains and sewers, and all of the special prerequisites of industries. The areas thus created are sold in fee simple to industries desiring to locate there.

The policy of retaining control of industrial areas by the public has been demonstrated as unsuccessful in the industrial areas at Los Angeles and New Orleans. An industry will not locate upon leased land when the lease may expire in twenty-five years, because the cost of capital investment cannot be amortized in so short a time. The lease of terminal lands, if on a basis of forty-nine or sixty-nine years, will attract industries, but this system curtails the borrowing power of the industry. At Venice the city was perfectly satisfied to create the areas and then recover the costs by the sale of the land, and trust to the increased tax values and the income from payrolls to return to the city its unearned increment during generations to come.

The new port naturally created the necessity for a town to serve the commercial port and the industries that located in this area. The experiment of Venice was rewarded with an instant response. Eighty-eight new industries located within the area the first three years the land was available for settlement, some coming in even before the streets, sewers, water mains, and power lines were completed.

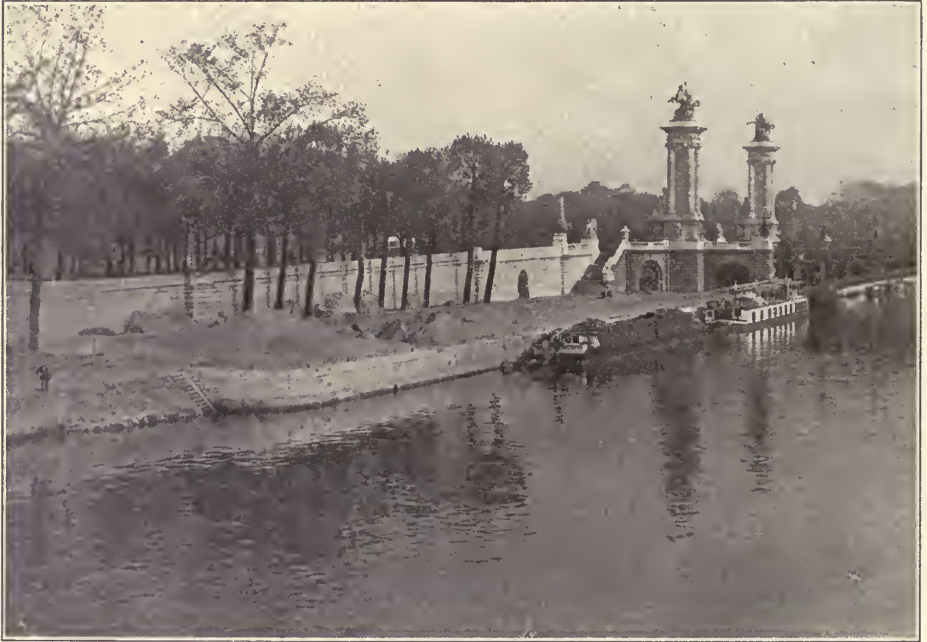
COMBINATION OF COMMERCIAL AND RECREATIONAL USES

A carefully planned port-city waterfront may well include parks and parkways, super-highways properly planted, pleasure-boat harbors or "marinas," and recreation piers for pleasure boats. A general architectural treatment of buildings, and the masking by tree plantings of structures and stock piles otherwise not easily beautified, are desirable. The city can use navigable streams for various kinds of commerce without interfering with park and parkway developments. This requires careful zoning of certain intermediate waterfront areas.

The very attractive little city of Stettin, on the Baltic, is the capital of the provincial government of Pomerania. It has several monumental public buildings located along the crest of a hill overlooking the Oder River. Between the buildings and the river are parks, or rather a park strip, with a waterfront driveway not located directly at the water's edge, but some one hundred and fifty feet back. The area between the driveway and the river is used for small-steamer services. Small package-freighters ply between the various cities of the Baltic, deliver package freight for local use, or pick up cargo for other cities at these quays. The transit sheds are located at intervals with wide open spaces between. These open spaces are very often used for the handling of construction materials. The buildings are harmonious architecturally, even though of low cost. Structural materials, such as steel girders, are frequently landed near the point where they are to be used. Excursion boats and small passenger-boats ply to Finland and Scandinavian points and the Baltic provinces and land their passengers and baggage at neat transit sheds similar to pavilions in a city park. It will be noted that this shipping is purely local. The great trans-shipment between ocean vessels and barges on the Oder-Spree Canal system and the railways of the interior is handled in an entirely artificial harbor of basins across from the city and branching from the river. A very large industrial area has been laid out to attract industries to this location.

These intermediate uses of waterfront area are little known in the United States, but the economies that can be effected in

building construction and in the cost of staple commodities may be very large. Such a layout relieves street congestion. Illustrative of this point, we may cite an example at Chicago. The *Chicago Tribune*, whose building is located on Michigan Boulevard facing the river, is constantly urging that the bridges be closed. The editors look out of their windows and see a sand and gravel



Building Materials on the Quays of the Seine, Paris

barge going up the river. This causes the bridges to be opened for three and one-half minutes, during which time the traffic backs up for several blocks. They think of the enormous economic loss occasioned by this delay. The fact of the matter is that the sand and gravel boat is carrying approximately ten thousand tons of building materials. It would take two thousand five-ton trucks to move the same quantity of material through the city streets. The added street congestion of these trucks distributing sand and gravel would cause far more delay to street traffic than the three-and-one-half-minute delay while the barge goes through a bridge.

The best known example of quay-boulevard construction is in Paris. Few of the hundreds of thousands of visitors to Paris every year notice the active shipping that goes on beside the River Seine in the very heart of the city. The port of Paris, by far the most important port of France in the point of tonnage, has an annual turnover of approximately fifteen million tons. This ton-



Loading Platform, Banks of the Seine, Paris

nage moves in barges from various canal systems converging upon the Seine, or is transshipped from ocean vessels at Havre or Rouen and delivered to the quays of Paris.

The quays are maintained by the municipality and are leased at a nominal sum which brings a good income to the city. For those operators who transport marble, Algerian wine in casks, peat, coal, sand and gravel, and structural steel for buildings, there are points along the quay conveniently located near the spot in the city where these materials are to be used. The quays of Paris are paralleled by such boulevards as the Quai d'Orsay, the Quai des

Invalides, and the Quai du Louvre. Fortunately, the topography lends itself to a complete screening of the Seine-side quays. The banks of the Seine are fairly high, making it possible to have the quays at a much lower level than the boulevards which pass along both sides of the river. These boulevards have a high wall and a closely planted row of trees, tall and slender. Even garbage for incinerators is handled over these low-level quays and not one visitor in a hundred ever notices this activity.

Other examples of a combination use of waterfront properties for boulevards and local shipping are to be found at Hamburg, Antwerp, in parts of Rotterdam, at Marseilles, and especially at Algiers, in northern Africa. Here, the harbor drayway, as we call it technically, is developed into one or two levels, as the terrain may make possible, and beautified until the waterfront has become the show place of the city.

HOUSING FOR HARBOR WORKERS

Another factor in port-city development is the housing of harbor workers. In New York a flag is run up when a ship is expected to discharge or load at a pier. Thereupon the longshoremen gather round the entrance to the pier in a semicircle called the "shape," and the Assistant Wharf Superintendent in charge of stevedoring picks out the men he wants by throwing them a brass check. This makes it very difficult to centralize longshoremen's living quarters at any point close to their work.

In the great port of Hamburg and other European ports the longshoremen are more closely organized and have developed collective bargaining to such an extent that all longshore labor employed by steamship operators is hired by contract through a central longshoremen's society. If a ship is expected to discharge at a certain quay, the Wharf Superintendent telephones the central office and says that he will need longshoremen to discharge so many thousand tons of commodity. The central office loads into boats the necessary crews to handle that particular commodity in the quantity mentioned, and takes them directly from the Long-



Recreational Waterfront - The Alster at Hamburg



Landscape Treatment, Banks of the Alster

WATERFRONT DEVELOPMENT AT HAMBURG

shoremen's Bureau to the wharf where the ship is to be discharged or loaded. As a result of this system it is possible for the City of Hamburg to provide model longshoremen's tenements.

Hamburg grew through the Middle Ages with little physical change in its structures. Until the Nineties most of the business was done in buildings three and four hundred years old picturesquely placed on the canals that are almost as prevalent in Hamburg as in Amsterdam or Venice. Naturally the sanitation of these quarters was of the period of Christopher Columbus, as the buildings were erected about the time of the great explorer. For many years the razing of these old structures and the provision of streets of adequate width and buildings with modern sanitation facilities were urged. However, it was necessary to have an epidemic of cholera in 1892, with more than fifteen thousand cases in the city of Hamburg, before the Senate and House of Burgesses could be scared into taking action that involved the expenditure of large sums of money. There followed the gradual destruction, during a period of twenty years, of these very picturesque but wholly inadequate buildings of the late Middle Ages over an area covering more than sixty-five acres in the heart of old Hamburg, and the cutting through of modern avenues for office buildings, shopping streets, and breathing spots in the form of parks and squares. At the same time longshoremen were provided with small, light, airy, and sanitary flats at low cost.

It is an extremely difficult task in the brief compass of a paper to cover very much of the technical side of the design of terminal areas. But perhaps this paper has pointed out some of the important relations between port and city planning and the need of coöperation in the solution of these perplexing problems.

Throughout all time the seas and their tributaries have been useful to man. Time with its inevitable changes has not made man less but rather more dependent upon them . . . Like the ancient Saxon, the man of to-day sails and fishes the sea and, unlike him, resorts to it for recreation, so necessary and so hard in modern life for the average man to obtain. FRANK B. WILLIAMS in "Public Recreation," Volume V of the Regional Survey of New York and Its Environs.

EDITORIAL

VALUE OF CITY PLANS IN EXPEDITING PUBLIC IMPROVEMENTS DURING A PERIOD OF DEPRESSION

Discussions of the value of city plans in expediting public improvements during a period of depression have ceased to be academic, for we now have not only a first-class depression but also many cities and regions with plans and active planning commissions. It has therefore seemed to us worth while to set down for future guidance any conclusions on this subject which have grown out of the experiences of the last year.

Accordingly, we wrote to fifty resident planning engineers in cities of the United States in various population groups, and asked four specific questions:

1. *Has your city done any municipal construction during the depression, partly at least for the sake of relieving unemployment, which it probably would not have done at this time under normal circumstances?*

2. *What kinds of work have been undertaken and approximately how much money will be expended upon them up to June 1, 1931 (or some other date if more easy for you to determine)?*

3. *Did this construction work form one or more items proposed in the city plan?*

4. *Was its undertaking facilitated by the existing city plan? In what way?*

Of the thirty-three engineers replying, twenty reported that their cities had undertaken construction work,¹ partly at least for the sake of relieving unemployment, which probably would not have been done at this time under normal circumstances. Of the thirteen cities which were not undertaking additional construction work, three were already engaged upon intensive construction programs which they had not found necessary to increase.

In seventeen cities, the additional construction work being undertaken included one or more items proposed in the city plan. In one of the three cities in which additional construction work

¹See review of "Planning and Control of Public Works" on p. 206 of this issue.

included no city plan projects, this was due to the fact that the city plan was not completed; in another, to the fact that the sewerage and water-supply systems were not included in the city plan. The engineer in the third city gave no explanation.

In fourteen cities, the additional construction work undertaken was facilitated by the existing city plan. In three, it was not,—in one case, because the city plan was not completed; in another, because the projects were not large and important enough to be part of a city plan. The engineer in the third city gave no explanation, and three failed to answer the question.

In answering the first question, a number of cities stated that the undertaking of additional construction work as a means of relieving unemployment has proved an important argument in successful campaigns for bond issues. A few fortunate cities had voted large bond issues for construction purposes prior to the depression and are now rapidly pushing forward the authorized work.

Many cities which are not undertaking additional construction work are accelerating jobs that are under way in order to employ additional men. Still other cities are spending all available funds for labor directly, as in maintenance work, rather than for the purchase of property and construction materials. A few cities are taking no action because they are handicapped either by debt limits or by concerted public opinion opposed to any increase in the burden of taxation at this time.

Naturally enough, many cities find themselves in the same condition as taxpayers,—out of working capital. In one case, this was due to the fact that several million dollars of city and county funds were lost in a bank failure. Only one city reported that it was not suffering seriously from unemployment.

The following are the principal kinds of municipal work reported as being undertaken: street paving, widening, opening and extension; sidewalks; park, parkway, and playground acquisition and development; forest preserve improvements; golf courses; airports; school and other public buildings; river straightening; bridges and viaducts; railroad track elevation; sewerage, water supply, and light systems; police and fire alarm systems.

Inevitably the reader will wonder how much of this artificially stimulated work is simply "busy work" and how much is constructive work, carrying further the orderly development of the city.

Practically all of the cities reported that a large part of the new construction work was on projects which were part of or in accordance with the city plan. This was particularly true of those cities which are carrying out long-term, budgeted programs. Kenosha, Wisconsin, was able to report that all of the work which has been performed in the last six years, together with the coming season's work, is a part of the definite city plan.

Cities were almost unanimous in reporting that these undertakings were facilitated by the existing city plan, one city going so far as to seriously question whether the projects would have been undertaken had they not been part of the city plan.

Planning engineers stated that existing city plans have expedited public improvements during this period of depression in the following ways:

1. *The fact that the undertakings were part of an accepted city plan gave the public confidence in their merits.*

One engineer stated this argument as follows: "Certainly the discussions that have gone on for years, relative to city planning and the need for improvements, have created a foundation for the taking up of such work when the need arises. The purposes of these improvements and their relation to the development of the city have become fairly well understood by the public. It therefore becomes easy to select from the plan for the improvement of the city those projects which can be most effectively carried out at any particular period."

One city reported that the city plan has been so thoroughly sold to its citizens that at the present time it is difficult so to control the desires of the citizens in the development of plan projects as to keep the city within reasonable financial limits.

2. *Improvements were particularly facilitated when they were items in long-term capital improvement programs for which financing had been arranged.*

3. *The city plan and its program of execution eliminate the usual delays* incident to a determination of which projects should be carried out first and which of several locations should be selected.

4. *Improvements were greatly facilitated when the city possessed detailed construction drawings for projects.* One city declared: "There was a time when we thought that we were anticipating matters by having detailed studies ready for various projects years in advance of the time of accomplishment, but it happens that this time has been accelerated and to-day we are already prepared for the projects that should be done, and can be done, to help the unemployment situation and yet carry out our comprehensive plan. In all cases, we have been able to proceed with the actual ground work without delay because definite plans have been available."

It is evident, of course, that the witnesses whom we have chosen might be considered prejudiced, being city planning engineers, and therefore likely to find good in a city plan if any is to be found. On the other hand, they are witnesses most likely to be cognizant of all the facts in the case, and we believe that their replies, as above summarized, give a fairly accurate picture of the relation between the city plan and unemployment relief, as it now stands.

H. K. M.

ZONING

I suppose the most interesting step forward in my day, along the line of city administration, the most fruitful, . . . the most hopeful, is represented by that phase of city planning which is known and which has interested us all under the name of zoning.—
DR. WILLIAM B. MUNRO *at convention of League of California Municipalities, as reported in the Los Angeles County Regional Planning Notes.*

CURRENT PROGRESS

Conducted by JOHN NOLEN and HOWARD K. MENHINICK
LAWRENCE VEILLER HAROLD S. BUTTENHEIM
ARTHUR A. SHURCLIFF CHARLES W. ELIOT 2d
GORDON J. CULHAM

THE OFFICIAL MAP

Carrying out a City Plan under the New York Act

By RICHMOND MOOT

Chairman, City Planning Commission, Schenectady, N. Y.

THE objective in city planning is a feasible plan. No matter how ideal it may be it must be capable of practical and profitable construction, and it is only by reducing a plan to exact scale and filling in all the details that its feasibility can be tested without the expense of construction or the risk of serious failure. So the city with an attractive general plan incapable of profitable construction, or without complete working drawings for the execution of the entire plan, may be worse off than a city with no plan at all. In the first case, a large expenditure of public funds without profit, demonstrating the fallacy of the plan, may so discredit planning that a feasible plan may not later be attempted. In the latter case, the way is still open to make and execute a practicable plan.

There are three phases of city planning: first, the preparation of general sketches of a scheme to be followed; second, the redesigning of the city on accurate topographic maps to exact dimensions and with engineering precision in detail; third, the reconstruction of the city and its expansion according to the exact engineering details shown on the real "city plan."

The preliminary sketches, commonly known as master plans, major street plans, or comprehensive plans, and frequently described under the popular misnomer of "city plan," are of value in the preliminary educational work necessary to arouse public interest in making the necessary appropriations for the preparation and execution of the final plan and for actual construction work. Lacking the detail and engineering accuracy necessary for actual construction, their value is largely limited to this preliminary educational work. Disregarding existing property lines and even the topography, as they sometimes do, radical changes are inevitable when an attempt is made to reduce these preliminary sketches to actual working drawings, and it is not surprising, therefore, that many so-called comprehensive plans have been pigeonholed after a brief period of enthusiasm. When an effort was made to

use them in actual construction it was found that they bore about the same relation to a workable plan that a sketch by Hugh Ferriss would bear to an architect's working drawing of a skyscraper.

The sketchy character and inevitable errors in the preliminary drawings commonly called city plans are not the fault of the city planner. Most cities lack accurate geodetic and topographic maps. Elevations have not been established with accuracy, often existing maps do not correctly show the location of street lines, and property lines are not shown at all. The local planning commission, without experience in executing a plan, thinks it wants a so-called master plan. It does not realize that the city lacks accurate maps and necessary engineering data. It wants a "comprehensive plan" prepared at the lowest cost, a mere sketch of a scheme of highway design, without the expense of obtaining the necessary data for an accurate working drawing. The city planner must supply what the market demands, but the problem is fundamentally that of providing what the city must have if it is to follow and carry out the plan successfully.

The second phase in city planning, the preparation of a detailed city plan, has been much neglected, though without it real success cannot be expected. There is far more in the construction of a city than the mere subdivision of land and the sale of building lots. Proper location of trunk sewers and all the feeders to the sewer system, of water lines, telephone and power lines, rapid transit routes, access to park and business areas, and the dispersion of traffic throughout the metropolitan area are involved to a greater or less extent in the laying out of every subdivision. The location of property lines is a serious problem which cannot be ignored, for, no matter how many interior property lines may be produced by subdivision, the property line of the original ownership will always remain as a fixed boundary. Nor does the subdivision of any particular piece of property necessarily come before the solution of all the general engineering problems may be necessary. The construction of a trunk sewer or power line across an unplatted farm in a hit-or-miss-location may become an insurmountable obstacle in the proper subdivision of the land at a later date. The interest of the present owner is only temporary. When his land is subdivided and sold, his interest ceases, but the interest of the public is permanent, and therefore the public function of the highways on every parcel of unplatted land must be kept of paramount importance. These engineering problems have usually been permitted to conflict with land subdivision. Either a sewer route is acquired and used before the subdivision is planned or a subdivision is laid out and sold before the sewer route is considered. If we are to obtain a reasonable solution of all these problems and stop the present enormous waste of public funds which they produce, we must work out a solution for all of them in detail before any subdivision or construction is undertaken.



PART OF A TYPICAL SHEET OF SCHENECTADY'S OFFICIAL MAP
New street lines are shown in heavy black

Contrary to popular belief, a street widening or extension, particularly in the business section of a city, is not merely a problem of condemnation and building-line setback. It involves all the underground structures of the street and their functions in relation to those in other streets. It is planning plus engineering as those terms are commonly used. The practice of piecemeal planning therefore must necessarily fail, for it gives no adequate consideration to the function the particular street widening is to play in the final rebuilding of the city, and no adequate consideration to the engineering problems under the pavement. In fact, the absence of a complete detailed plan leaves all other property owners in the city without accurate knowledge as to the exact location of future street lines on their property so that, even if they are disposed to coöperate for their own profit and the good of the community, they are unable to do so. They build expensive structures in what should be the path of future development. They build in what should be the bed of a mapped street, and thus block an extension of the improvement and the achievement of the purpose for which the first part of the construction is being undertaken at public expense. With a complete detailed city plan drawn to scale and adopted as an official map this difficulty is largely obviated, for every property owner then knows the exact location of every future street line, whether the improvement is under construction or not, and under the law he may not build within the bed of a mapped street any structure which will tend to cause abandonment of or change in the plan as adopted. The law requires his coöperation for his own profit and the common good.

The third phase, construction according to the plan, is the proof of the pudding, for any plan incapable of execution is of doubtful value. The value of city planning is not in the pleasure of making plans or talking about them, but in putting them into actual operation. The publicity attending the first campaigns for city planning, the educational work of the press, and the preliminary sketches commonly referred to as major street plans, master plans, or comprehensive plans, are hardly worth while unless they result in actual construction according to accurate engineering details. Here lies the value of the Official Map Law of New York State. It is not the only method of putting a detailed city plan into execution, but it is the simplest and the best method so far devised.

The history of effective city planning is a history of accurate detailed engineering maps published for the information of the property owners and the public and usually enforceable under some kind of police power regulation. The plan prepared by Sir Christopher Wren for the rebuilding of London after the great fire failed of execution because of dissension created by a rival plan and the inability of the King to decide which plan should be carried out. Neither plan was carried out. But the excellence of the one prepared by Sir Christopher Wren has kept up a continual popular agitation for its adoption and execution.

The work of L'Enfant in designing the city of Washington, and the planning of many other American cities by the engineers of the Continental Army following the Revolution, were such detailed plans. The location of street lines and park areas was definitely shown and in most cases the mere acceptance of the plan by the public as the one which should be followed was sufficient to put it into execution, though in the case of Washington the property was actually acquired and the streets and lots laid out by the Government in conformity with the plan and under the direction of Major L'Enfant as the government engineer.

The history of the development of the street system of the city of New York has been one of a succession of similar detailed plans, extending from the old Dutch settlement at the Battery over the Island of Manhattan and throughout the metropolitan area. As early as 1808 the haphazard street system in lower Manhattan resulted in a planning commission,—of which De Witt Clinton was a member,—the employment of a civil engineer, and a detailed plan for the rebuilding of that part of the city. It is to New York City that we are indebted for the experience and practical demonstration of the efficiency of official map laws which were the predecessors of the laws now applying to all cities, villages, and towns throughout the state of New York, and other similar legislation adopted in Pennsylvania and recently in New Jersey.

The Official Map Law provides that the legislative body of the municipality may adopt an official map showing existing street lines and any proposed changes. The Law prohibits the issuance of building permits for the construction of buildings within the bed of mapped streets, thus protecting the new street lines which by the adoption of the official map become building lines. In most cases this restriction is merely a regulation and not a taking of property and therefore involves no constitutional right of the property owner. It is merely an exercise of the police power of the State now well established under court decisions in connection with building line setback and front-yard restrictions under zoning ordinances. In protecting the plan against expensive building construction before the plan can be carried out and thus preventing anyone from defeating the final objective, it is the most effective means yet devised. It should be noted, however, that no general "master plan" of the type so common can meet the requirements of this Law, for the street lines to be enforced by the building inspector must be so accurately established on a map of sufficient scale that there can be no question where the new street line is on any piece of property.

There may be a rare case where the new street line brings so much of a particular property within the bed of a mapped street that the property owner cannot comply with the new street line as a building line and still get a fair return on his property. This would be an invasion of his constitutional right to a fair return. In such a case the Official Map Law permits

him to apply to the Board of Appeals for his building permit. The burden of proof is on him, but if he can show that he cannot get a fair return without invading the bed of the mapped street, the Board of Appeals may give him a permit for building construction across the new street line, but the Board of Appeals is required by law to see that such a building will interfere as little as possible with carrying out the plan and will tend to cause a minimum change in the plan. Public interest, even in a case such as this, must be kept paramount.

The Official Map Law also prohibits public improvement of any street not shown on the official map. The purpose of this provision is to prevent any more haphazard real estate development without proper consideration of planning and engineering problems. The practical result of this requirement is that every subdivision plan must be shown on the official map before the streets can be developed as part of the public street system. Obviously the law contemplates a map showing a complete street system in detail,—a real city plan to scale.

With such a complete detailed official map, the operation of the Law becomes largely automatic. Every property owner desiring to lay out a subdivision may see on the official map how his subdivision should be laid out and how it will connect with the subdivisions of all neighboring property. He has the assurance that all engineering problems, street grades, sewer grades, cut and fill, as well as access, have been fully considered. Instead of paying a civil engineer to make a piecemeal plan, in ignorance of conditions on adjoining properties, thus continuing the development of a crazy-quilt street system, he now sees on the official map a practical solution of all his problems. Every civil engineer has a complete set of the sheets of the official map. In laying out a subdivision all that is necessary is to follow the street system shown on that map, and as soon as the subdivision plan is filed the streets already shown on the map can be developed by the municipality as part of the municipal street system. It is the line of least resistance. No bother, expense, or delay, and no special legislation is necessary to enable any property owner to lay out his property and have it developed at any time; but if he attempts a subdivision scheme differing from that shown on the official map he is confronted with the necessity for special legislation, changing that part of the official map under ordinance of the council after public hearing; and to justify a proposed change he must redesign street systems on adjoining properties so that the plan will still be workable. The property owner naturally follows the line of least resistance, as does the civil engineer who merely copies from the official map to large scale the street system as adopted by the city council.

It may be argued that the planner is doing all the subdivision work for all private property owners. He should, for his principal interest is the public service to be performed by the streets after the lots are sold and the sub-

divider has ceased to have any interest in the property. Only by following one consistent design can we hope to make a modern city as it should be. Topography and the public function to be served by the street system, rather than the selfish interest of the subdivider, should control the design. The detailed city plan is the working drawing. The Official Map Law provides the simplest method for its enforcement.

CITY PLANNING PRINCIPLES WIN IN ST. PAUL

The long drawn-out controversy over the location of a \$1,500,000 state office building in St. Paul, the capital of Minnesota, has been settled by a unanimous vote in the Senate and a vote of 109 to 6 in the House of Representatives on a bill which will place the building in accordance with the city plan.

In 1929 the Legislature appropriated \$1,500,000 for this building and created a commission to construct the building forthwith. The commission, shortly after its appointment, decided to face the office building with brick (making it a purely utilitarian building), and to place it in the rear of the Capitol on land already owned by the State, which had been purchased for the purpose of preventing the construction of an apartment building so close to the State Capitol.

The City Planning Board of St. Paul immediately opposed these plans; aroused the interest of civic leaders throughout the state; asked the Minnesota Federation of Women's Clubs and the Minnesota Federation of Architectural and Engineering Societies to support the Planning Board, which they did; and secured newspaper support in both St. Paul and Minneapolis. As a result, the building commission gave up its right to select the site and referred the matter back to the State Legislature.

At a meeting on March 30, the building commission located the office building as instructed by the Legislature in accordance with the Cass Gilbert Plans for Capitol Approaches prepared at the request of the City of St. Paul and published in the "Plan of St. Paul." Condemnation proceedings on the land have been started.

The office building, in its new location, will front an axis of the Capitol, will be a companion building to the State Historical Building which has already been constructed, and will form the nucleus for a remarkable group of public and semipublic buildings along an axial approach to the Capitol. The building will be faced with granite.

GEORGE H. HERROLD,
*Managing Director and Engineer,
St. Paul City Planning Board.*

RESEARCH ON PARKWAYS BY HARVARD SCHOOL OF CITY PLANNING

The influence of parkways on land values and social values is the subject of one of the 1931 researches of the Harvard University School of City Planning. Mr. John Nolen, city planning consultant, and Associate Professor Frank DeWitt Washburn of the Harvard University Graduate School of Business Administration are conducting this study, the results of which will be published as one of the volumes of the Harvard City Planning Studies.

The importance of the research is indicated by the fact that decisions, being made daily, establish the permanent character and location of these thoroughfares, involve the expenditure for them of millions of dollars of public funds, and greatly affect the rate, direction, and character of the growth of our cities.

Mr. Nolen will seek specific answers to such questions as the following. What are now the particular functions of the existing types of parkways? How completely do they fit our present and probable future needs? If they do not fit, what modifications should be made? He will consider the traffic services of parkways and their contribution to public recreation. Do they have an injurious effect upon residential property as they become devoted to highly congested traffic and inter-regional communication, or does the provision of a park area between the thoroughfare and the occupied land preserve residential values? Of what service are they in the resuscitation of a blighted district?

Such varied outstanding examples as the parkway systems of Boston, Minneapolis, Kansas City, Mo., and Westchester County, N. Y., will be studied. Reasons for success or failure will be determined and the findings stated so that they may be of value to other communities throughout the country.

A particularly valuable feature of the report is the economic study of the effect of parkways upon land values. Professor Washburn will consider property throughout the region as well as abutting property. Balancing the increased land values produced against the costs of land acquisition and construction of improvements he will attempt to determine whether the net economic result is a profit or a loss.

The findings will be checked to determine to what extent they have been influenced by a possible transfer of values from other sections, by general changes in real estate conditions and values, and by changes in money rates and price levels.

H. V. H.

ZONING ROUNDTABLE

Conducted by EDWARD M. BASSETT

THE BOARD OF STANDARDS AND APPEALS OF THE CITY OF NEW YORK

Mayor Walker appointed a committee to recommend improvements in the rules relating to the Board of Standards and Appeals, but everybody knows that the rehabilitation of the board is much more a question of right men than of different rules. The basic rules prescribed by the charter for the conduct of this board are used in more than five hundred municipalities in this country, and are working excellently. The Department of Commerce, Washington, adopted them in its standard form of zoning enabling act recommended to state legislatures and used by more than twenty-five states. No court in this state has criticized these rules, but on the contrary, court decisions have frequently commended them. Adverse court decisions in this city have repeatedly referred to unlawful acts of the Board of Standards and Appeals and abuses of discretion by it. These facts show that the officials and not the rules have been the main trouble. In Providence, Hartford, New Haven, Cincinnati, Kansas City, Denver, and dozens of other cities that might be named, variance applications are handled by zoning appeal boards on their merits and without scandals.

No other city has produced favored agents for applicants before the board, as has been the case in this city. Boards in other cities encourage owners and architects to appear without employing agents. A former chairman in this city made applicants and architects hesitate to present their own cases because of his brusque (not to say dictatorial) methods in hearings. The statutory hearing was perverted into a violent argument with the chairman, in which he, of course, had the upper hand. He quickly rushed the application to a vote, and the inexperienced or uninfluential speaker was often defeated without an adequate hearing. Such methods convinced taxpayers that their only chance for a permit was to retain an agent. In fairness it should be said that Acting Chairman Connell is much more patient, but the average applicant still thinks he will lose unless he retains an agent. One aim in the rehabilitation of this board should be to convince the taxpayers that a lawful variance is a matter of right and not a political favor, or any other sort of favor.

* * * * *

Abuses of discretion by boards of appeals throughout this country are sought to be excused by the rule of practical difficulty and unnecessary hardship. This is the case in this city. This rule is the only one prescribed by the New York City Charter itself. It was intended to be broad and comprehensive, because the exceptional instances that are sure to occur in any zoning ordinance and maps are so numerous that they cannot be itemized, and so unforeseen that nothing but general words can cover them. But because the words are comprehensive and general, they are often utilized to justify variance permits in cases where there is no practical difficulty or unnecessary hardship whatever. The courts have repeatedly made it plain that an opportunity to make more money out of some non-conforming building does not constitute a practical difficulty or unnecessary hardship. There must be something in the surroundings that makes the applicant's lot practically useless unless he receives a variance permit. For instance, a vacant lot in a residence district between two non-conforming public garages would rightly receive a variance permit on the ground of practical difficulty and unnecessary hardship. But it is unlawful for the board to grant a variance permit on these grounds because it thinks that the neighborhood may need a non-conforming business or structure, or because the applicant brings many friends to his aid.

Why have a rule that is so easily evaded? The answer is that a comprehensive rule must be established by the state law, or else there will be constant declarations of unconstitutionality by the courts. The dangers of the strict letter of the law are innumerable. Sometimes a boundary line crosses a single lot ownership. A lot may have an irregular shape. It may be off grade. It may be surrounded by injurious non-conforming buildings. Required yards often have to be adjusted. The height regulations sometimes can be varied in particular points to the advantage of all concerned, including the public. But if the board is fair and keeps free from improper influences, there is seldom any trouble in deciding the question.

Other rules of conduct are prescribed by the Board of Estimate under the sanction of the Charter. This power makes it possible for the local legislative body to increase the authority of the Board of Standards and Appeals from time to time. These items are separate from practical difficulty and unnecessary hardship. All the rules contained in the zoning resolution itself are of this sort. They embrace two-year temporary permits, public garages in business streets where an earlier garage existed, and 80 per cent consent garages. These special exceptions may be subjects of abuses of discretion, but if the board follows the rule itself, it is generally upheld by the courts.

These rules, which need to be stated in the resolution itself, have been much neglected by the Board of Estimate. They should be kept up to date, but they are not. For instance, gasoline filling stations were originally allowed in business districts. By an amendment they were relegated to unrestricted

districts. No power was given the Board of Standards and Appeals to allow them in the right spots in business districts. The result is that there is no authority in the Board of Standards and Appeals to grant a variance permit for a new gasoline station, excepting on the grounds of practical difficulty or unnecessary hardship. Nine times out of ten this rule does not apply, and if it is used as a basis, the permit is unlawful. The 80 per cent consent method, which applies to public garages, should also apply to gasoline stations in business districts. This was recommended to Mayor Walker in the report of the City Committee on Plan and Survey in 1928, but no action was taken by the Board of Estimate. It is common for applicants for gasoline stations to present 80 per cent consents, and these often prompt the Board of Standards and Appeals to grant the permit after a hearing. The result is that practically all of the gasoline station permits in business districts are unlawful. Now and then one comes under practical difficulty and unnecessary hardship, but the vast majority are granted by the Board of Standards and Appeals without any lawful justification. It should be said that the tardiness of the Board of Estimate is largely to blame. But if the Board of Standards and Appeals would state to applicants that it was without authority to make variances for gasoline stations, it is likely that the Board of Estimate would make the needed amendment.

* * * * *

Ever since the beginning of the second Hylan administration, the work of the Board of Standards and Appeals has given rise to charges that the board was breaking down the zoning law. The testimony of Dr. Doyle regarding his fees did not serve to lessen this criticism. Almost every zoned municipality in the United States (and there are now over nine hundred of them) learned that something was wrong in the administration of zoning in this city. This impression hurt New York, but did not seem to affect the spread of zoning throughout the country. What was the cause of the trouble? Regardless of the motives of the board and regardless of whether these motives were good or bad, the fact remains that the board misunderstood the law under which it acted. This misunderstanding of the law, not only in this city but in other cities where there has been criticism, is always one and the same. The board forgets that it has no power beyond the rules prescribed for it by the state and local legislatures. It is easy for a discretionary board to magnify its own powers, and gradually forget that its acts are strictly limited to clearly defined fields. Whenever it travels outside these fields its acts are oppressive and usurp the functions of the local legislative body which created it. The Supreme Court in at least thirty cases has pounded on this point in reversing or criticizing the acts of this board in this city. What are these fields under zoning? Practical difficulty and unnecessary hardship, enlargement of a store or factory upon its own lot, extension of a building on

a district boundary into a more restricted district, public utility buildings, garages in business streets where there was already one public garage before 1916, 80 per cent consent garages, and two-year temporary permits. These are the only grounds for making variances. If others are made, they will be pronounced void if they go to court. For every voidable permit that goes to court there are probably twenty such that never go. Aggrieved neighbors do not like to spend their own money on lawsuits. When the unlawful building is actually erected, it is almost impossible to make a change. The hands of the corporation counsel are tied because he must defend the acts of city departments. The courts rightly uphold the owners of completed buildings where neighbors have not begun suit promptly.

A single illustration out of many must suffice. The board has no power to start business centers in residence districts. Business centers bring a high land value especially if the surrounding land must be used for residences. This power is strictly legislative and only the Board of Estimate can change the map. Nevertheless the Board of Standards and Appeals allowed a certain applicant for an apartment-house permit in a residence district at Sedgwick Avenue in the Bronx to build stores on the ground floor on the astounding excuse that residences were numerous in the locality and it was a hardship for the occupants of these residences not to have stores in the vicinity. The intention of the rule of practical difficulty and unnecessary hardship was perverted to make this valuable special exception. The rule of practical difficulty and unnecessary hardship is for the benefit of the lot of the applicant. The situation of this particular lot must be such as to invoke this rule. For instance, in a residence district where three corners were occupied by stores built before the zoning plan, the owner of the fourth corner might ask the board of appeals to grant him a special exception on the ground of practical difficulty and unnecessary hardship because the situation might not be suitable for a residence building. If any neighbor had taken this Sedgwick Avenue store permit to court, the court would undoubtedly have declared it void, but the neighbors were probably well suited to have a business district start near them. They may have hoped that it would be enlarged to take in their property. At any rate no one took the matter to court, the stores were built, and strangely enough the apartments over the stores were omitted.

Where a discretionary board will not stay within the lawful limits of its discretion, wrongs like this are sure to happen.

E. M. B.

LEGAL NOTES

Conducted by FRANK BACKUS WILLIAMS

NOTES AND DECISIONS

ANOTHER DECISION ON THE NEW YORK PLANNING LAWS

No recent statutes, perhaps, are of greater interest to city planners at this time than the recent New York City Planning Commission laws. These statutes,¹ as our readers will remember, establish the city plan under the police power, without compensation. There are two schools of thought on the subject, one of which believes that such establishment is both desirable and constitutional, while the other, conceding its desirability, advocates the use of the power of eminent domain for the purpose because it doubts the validity of the employment of the police power in this connection.

The New York laws, by establishment of street lines, not only prevent the building of structures in the bed of mapped streets but also require platters to make a reasonable provision for parks. Both in the establishment of the city plan and in the requirement of parks, there is an appeal to a board of appeals in cases of hardship.

Some time ago, a case involving their platting features arose under the New York laws² supporting them in a very general way. A second case³ has now been decided in their favor. In this case the park requirement in platting is unequivocally upheld. The requirement that land platted "shall be of such a character that it can be used for building purposes without danger to health," is also interpreted: the court holding that it does not authorize a rule by the planning board that a water system must be installed before the plat will be accepted, but would support the rejection of a plat of swamp or bog land for housing. The court also holds invalid the requirement that lots should be at least sixty feet wide, as an illegal method of preventing congestion.

¹1926, Ch. 719, for cities and villages; 1927, Ch. 175, for towns. A similar law is now in force in New Jersey, 1930, Ch. 235, applicable to all municipalities in the State.

²Village of Lynbrook v. Cadoo, 252 N. Y. 308.

³Matter of Lake Secor Development Co. Inc., v. Ruce, Supreme Court, Westchester County, Apr. 25, 1931.

ZONING HOSPITALS

It has always been a matter of doubt whether a hospital, devoted to the care of those afflicted with the general run of disabilities, could reasonably be excluded from a residential district, since on the one hand a residential district is best for the hospital, and on the other hand it is usually regarded by the other residents in the district as undesirable. There are cases on both sides of this question in several of our states.¹ A later case on this subject in California² holds that although the exclusion of existing institutions of this sort in zoning is illegal, they may be thus kept out in future, the districts in which the city permits hospitals not being unreasonably small.

In this connection the court takes occasion to lay down a general rule with regard to retroactive zoning, stating that it is valid only in the case of uses that are nuisances.

FRATERNITIES

The Nebraska courts have just held³ that in a zoning district which the court describes as an "exclusive residential district" the chapter house of a college Greek-letter fraternity is not, under the ordinance in question, a "residence" permissible therein. There are many cases more or less in point. The different ways in which they are decided are due in part to the difference in the wording of the ordinances under which they are decided. It should be noted, also, that the judges, in using such expressions as "residence" and "residential," are not always sufficiently explicit to make their meaning clear.

OIL WELLS IN RESIDENTIAL DISTRICTS

In a case⁴ of great practical importance the California courts have held that the provision of a Los Angeles zoning ordinance prohibiting oil well drilling in a good residential district was valid, in spite of the fact that the owners, prior to the ordinance, had expended \$136,000 in preliminary work. Decisions in this case in the lower courts have been noted from time to time as they occurred. The reader will recall cases with regard to the right to extract elements of the soil and use them, as more or less in point. The decision is an application of the doctrine of reasonableness to the circumstances of the cases. Most interesting is the statement of the court that this zoning is permissible as a regulation by the city of its future growth and development.

¹See, for instance, this department in CITY PLANNING, Oct. 1929, and Apr. 1931.

²Jones v. City of Los Angeles, 295 Pac. 14.

³City of Lincoln v. Logan-Jones, 235 N. W. 583.

⁴Marblehead Land Company and Standard Oil Company of California v. City of Los Angeles, *U. S. Daily*, Mar. 11, 12, 13, 14, 1931.

PROTECTION OF INDUSTRIAL ZONES

In a proper case the courts will uphold the rights of factory owners in industrial zones. A resident in such a zone was recently refused an injunction of a welding company in Alhambra, California, in operating its plant at night, the industry being legitimate and operated in accordance with modern methods.¹

THE PREPARATION OF ZONING ORDINANCES

The latest contribution of the Department of Commerce of the United States to intelligent zoning is a report, dated January 13, 1931, of the Division of Building and Housing, Bureau of Standards, entitled "The Preparation of Zoning Ordinances, A Guide for Municipal Officials and others in the Arrangement of Provisions in Zoning Regulations." The title of this report would seem to be unduly modest, as it gives much of value with regard to the wording and content of these ordinances. To the body of the report is added an appendix containing forms, and a list of the statutes in the various states based upon the standard act prepared by the Department.

STATE LAWS GOVERNING ADVERTISING SIGNS ON HIGHWAYS

The progress of the movement for the regulation of outdoor advertising is evidenced by the publication of a report on the subject by the United States Bureau of Public Roads. This report is in two parts. The first part is entitled "Compilation of Laws of the Several States in Force on May 1, 1930." This part gives a reference to the laws in the different states and a summary of the contents of each of them. The second, and much shorter part, called "State Laws Governing Advertising Signs on Highways," gives a resumé of these laws as a whole.

MUNICIPAL RESEARCH REPORTS

The *National Municipal Review* has published a "Selected List of Recent Municipal Research Reports" of value to city planners for reference.

A QUESTION ON BUILDING LINES

To the Editor:

Could you tell me whether or not there has been any legislation enacted which would give a municipality the right to enact a setback law conforming with the major street plan, in anticipation of future street widening?

We have been going under the theory that this could not be done unless the city stood willing to pay the property owner for the strip at any time he wished to build and actually set his building back according to the future plan of the street.

¹Collins v. Southwest Welding & Manufacturing Co., before Judge Yankwich, Superior Court.

I am under the impression that there has been worked out by communities some arrangement of procedure making it unnecessary for the city to pay for the strip until they actually use it for street purposes, and I thought that you might know what has been done along this line.

R. W. OLMSTED,

Chairman, City Planning Commission, Chattanooga, Tenn.

ANSWER

My dear Mr. Olmsted:

You are quite right. There are, as you know, two sorts of setback: the one based upon the power of eminent domain, with compensation, the other based upon the police power, for which no compensation is needed.

The eminent domain setback may be established in anticipation of street widening. The police power setback, however, is used to create what are really front yards, for light and air. In fact they may be of advantage in future street widenings; but if established for the purpose, they will be held invalid by the courts. To this effect there are several cases, the latest of which, if I remember rightly, is *State ex rel. Wittenberg v. Board of Appeals of City of West Allis* (Wisconsin, December 6, 1929), digested in *Zoning and Planning Notes, American City Magazine*, April, 1930.

F. B. W.

BETTER HOMES

The ten years just passed in which BETTER HOMES IN AMERICA has been active have not materially changed our ideal of the better home. We are still showing model homes. . . . We still stimulate the home owning impulse with slogans, and point out the social and physical evils of multi-family mingling under one roof. For about the same period the United States Bureau of Labor Statistics has collected housing data in 257 cities. The record shows a great falling off in the percentage of families occupying one-family houses, from fifty-eight per cent to forty per cent, a moderate decrease in the occupancy of two-family houses, from eighteen per cent to eleven per cent, and a doubling of the percentage of multi-family occupancy. In 1929, forty-nine per cent of the families in these cities lived in apartments and flats, mostly flats. A strong trend toward multi-family housing is indicated.—*From "Planning Broadcasts," Bulletin of the Planning Foundation of America and the National Conference on City Planning.*

N. C. C. P. & A. C. P. I. NEWS

Conducted by FLAVEL SHURTLEFF, Secretary

INSTITUTE MEETINGS

On April 18 the American Civic Association met with the American City Planning Institute to hear a presentation of the most recent proposals of the New York Regional Plan. The speakers for the Regional Plan were Mr. Harold M. Lewis, who presented the transportation groundwork, and Mr. Thomas Adams, who discussed some of the more controversial and radical suggestions.

Mr. Adams said, among other things, that as far as possible only 40 per cent of land should be built upon and that this should apply to all areas as a minimum; that cities should be divided into central areas, subcentral areas, intermediate areas, and suburban areas; that change of use from residential to business should not in itself be a reason for increasing density; that no part of a building used for residence should be more than two rooms deep, with reasonable allowance for projections; that all loft, department store, and office buildings should be required to have rear access from lanes or equivalent open space for loading and unloading.

At the annual meeting of the Institute at Rochester on June 21, the general subject for discussion was "Problems of Home Building in Relation to Neighborhood and Town Planning."

ROCHESTER CONFERENCE

The program of the Twenty-third National Conference on City Planning at Rochester, New York, opened on the morning of June 22 with a discussion of transportation and traffic. In the afternoon, at three simultaneous section meetings, "The Relation of City Planning to Special Assessments," "County Planning," and "Zoning Administration" were discussed. Rochester's city planning accomplishments were outlined in the evening.

A breakfast zoning roundtable, a civic luncheon, a motor tour, the President's address on the question, "Is City Planning Effectively Controlling City Growth in the United States," and a talk on "Civic Centers in Smaller Cities" were features of the second day.

On the third day, the breakfast roundtable on "The Function of the Plan Commission" was followed by a discussion of "Master Plans and Official Maps—The Basis of Effective Planning." The afternoon meeting, devoted to a consideration of "The Avoidance of Blight in Areas Adjacent to Traffic Thoroughfares," and a business session terminated the Conference.

BOOK REVIEWS & LISTS

Conducted by THEODORA KIMBALL HUBBARD

PRINCIPLES OF CITY PLANNING. By KARL B. LOHMANN. New York, McGraw-Hill Book Company, Inc., 1931. 395 pages. Photographs, plans, diagrams. $9\frac{1}{4}$ x 6 inches. Price \$4.00.

Much water has flowed under the bridge since the last textbook on city planning, as practiced in the United States, was written some fifteen years ago. The recent expansion and rounding out of the subject is well indicated by a glance at the twenty-four chapter headings of Professor Lohmann's new book. Designed primarily for the classroom, it is intended to appeal also to city officials, especially members of planning commissions, and to the general public. No attempt is made to go into exhaustive detail,—in fact this would be quite impossible within the covers of a single 400-page book. Unlike most modern engineering sciences, city planning derives its significance not from a further subdividing of the field for minute study but from a synthesis of many fields in one broad view. The city planner cannot hope to master the details of all these special subjects but he must understand their principal elements and particularly how they interrelate in the building of the city.

That city planning is still very new is evidenced by the numerous references in the present book to the views of individuals who are leaders in one aspect or another of the subject. Many of their ideas, convincing as they are in theory, have not as yet been tested out sufficiently in actual practice to be accepted unreservedly. Frequent use is also made in the book of the historical method in presenting various phases of the subject, especially those the development of which is so recent that still further changes seem sure to ensue. An unusual feature of interest is a series of portraits of men, now dead, who have been most eminent in the city planning movement in America.

The extensive reading lists at the end of each chapter are generously sprinkled with references dated within the last year or two. There are also sets of questions for discussion. Most of the illustrations are new, many of the photographs having been either taken or collected by Professor Lohmann on a study trip taken during his recent sabbatical year.

Throughout the book the detached viewpoint of the author, himself trained as a landscape architect, distinguishes it from earlier volumes written by engineers or architects, or comprised of chapters written by different specialists. There is great need for a book covering the entire city planning field in a uniform manner.

ARTHUR C. COMEY.

PLANNING PROBLEMS OF TOWN, CITY AND REGION: Papers and Discussions at the Twenty-second National Conference on City Planning held at Denver, Colorado, June 23 to 26, 1930. Published for the Conference by Wm. F. Fell Co., Philadelphia, Pa., 1930. 239 pages. 9¼ x 6 inches. Price \$3.00.

A greeting from President Hoover introduces the collection of papers which make this volume one of the most interesting in the long and valuable series of Proceedings. Following the President's address by Mr. Bassett, there are two papers on subdivision regulation by Messrs. Jacob L. Crane, Jr., and L. Deming Tilton, in which their most recent experiences, especially in Illinois and California respectively, are summed up, with important recommendations, of which the most striking is that for advance preparation of subdivision layouts by the city planning commission. Street traffic problems are discussed by Dr. Miller McClintock, and modern motor arteries by Mr. Gilmore D. Clarke and others, representing the points of view of Westchester County, Detroit, Philadelphia, and Pittsburgh. Analyses of condemnation and special assessment problems are presented by Messrs. Bernard of St. Louis and Hoelscher of Fort Worth, Texas.

The particular appropriateness of these topics to a conference held in Denver appears in the discussion of zoning administration by the Chairman of the Denver Zoning Board of Adjustment, in the paper by Mr. Braden of the Recreation Association of America on recreation planning in western cities, together with an inspiring talk on planning National Parks by the Director, Mr. Albright, and in the civic center papers by Mr. Charles W. Eliot 2nd, and Miss Charlotte Rumbold showing the developments of Washington and Cleveland.

Airport planning receives space in the digest of the recent Harvard study and the presentation of Department of Commerce principles by Mr. C. M. Young, Assistant Secretary for Aeronautics. The symposium on the value of a plan commission is notable because of the participation of two mayors in addition to Mr. Bettman, representing Cincinnati, and Mr. Gardner S. Rogers, the survey worker of the Chamber of Commerce of the United States.

Most novel of all papers in the volume, however, is the talk "Is City Planning News? If Not, Why Not?" by Mr. T. A. Nettleton, staff correspondent of the *Christian Science Monitor*, who secured encouraging opinions from some twenty-five leading newspaper editors. As a blessing on this practical aid to planning commission publicity programs comes Mr. George B. Dealey's word from Dallas.

The twenty-third conference at Rochester will have had to work hard to surpass the permanent record of its predecessor.

T. K. H.

PLANNING AND CONTROL OF PUBLIC WORKS. Report of the Committee on Recent Economic Changes of the President's Conference on Unemployment including the report of Leo Wolman of the National Bureau of Economic Research, Inc. New York, National Bureau of Economic Research, Inc., 1930. 260 pages. 9 $\frac{1}{4}$ x 6 inches. Price \$3.00. (Publications of the National Bureau of Economic Research, Incorporated. No. 17.)

The Committee on Recent Economic Changes of the President's Conference on Unemployment presents in this report its conclusions from an investigation of the planning and control of public works, especially in relation to employment.

The report points out that the unemployment problem cannot be solved by increasing the volume of public works because the increase is not able to absorb a substantial proportion of the unemployed, leads to the undertaking of works not really required by the government, and results in great waste in the administration of the job. The Committee regards as impracticable proposals to create an "unemployment reserve" by contracting the volume of public construction during periods of full employment, and expanding it during periods of slack employment, especially in view of the fact that practically all governments are far behind in their public works programs.

However, it comes to the conclusion that if federal, state, and municipal authorities were prepared to expedite public construction at the inception of an approaching depression, the accumulation, on a national scale, of even relatively small and scattered projects might be a steadying influence and an important factor in restoring reasonable economic balance.

Recognizing the need and value of city and regional planning, the Committee declares:

"Long-range planning and budgeting are necessary if the full value of public works as a stabilizing influence is to be developed. . . . Fortunately, the recent trend toward city and regional planning makes the task an easier one than it would have been even a few years ago. . . . Comprehensive physical planning of public works within each city and region is a clear and evident need. This enables sites to be acquired in advance and plans to be made well ahead of the actual start of the work, so that when an emergency comes discretionary projects can go ahead with assurance that they are properly located and well adapted for the purpose for which they are intended, and without the delays that might ensue if the relative merits of different locations and alternative plans for structures had to be debated, or else decided arbitrarily on the basis of hasty consideration.

"Long-range budgeting of capital expenditures, in which the programs of the several local government departments are harmonized, is another feature of planning which has not yet been adopted as widely as it should be. . . ."

The conclusions of the Committee are obviously based upon Mr. Leo Wolman's report, which comprises the major portion of the volume and merits careful study and consideration.

Our country, of course, has not experienced its last depression. Every forward-looking city planner who would realize his opportunity to assist in preventing or minimizing the effects of another depression will find guideposts as well as ammunition in this volume.

H. K. M.

NORTH-EAST KENT REGIONAL PLANNING SCHEME. Report prepared for the North-East Kent Joint Town Planning Committee. By ADAMS, THOMPSON & FRY. London, 1930. 82 pages. Plates (including aerial photographs), maps, folded plan. 12 x 9½ inches. Price 10s. 6d.

In February, 1931, it was reported in *Garden Cities & Town Planning* that there were then in England and Wales sixty Joint Advisory and twenty Joint Executive Committees, including some 880 Authorities, and comprising an area of 13 million acres, with a population of 31 millions. Spotted on a map of Great Britain, these regional bodies cover a very impressive and significant proportion of the whole area,—considerably more than the area covered in 1929, which was depicted on a map published in the pages of the same journal.

This should be compared with the map published in the *Journal of The Town Planning Institute* (London), January, 1931, which showed "Town Planning Regions of England and Wales," recording in approximate order of formation some 104, many of which are really what we should call towns and their surrounding districts. Of regional reports listed in connection with the map there are thirty-three to that date, representing, we find on looking over the reports themselves, the advice of a considerable number of consultants, of whom Professors Abercrombie and Adshead, Mr. Davidge, and Adams, Thompson & Fry are outstanding.

As a matter of interest, the reviewer has just had laid off on an outline map, not the area represented by regional committees, but the present area represented by published English regional plan reports, of which there are now over three dozen, starting with a very few in 1922 and 1923 and increasing to a substantial number as the more active committees bring their work to definitive form.

It is striking to see the grouping of these report areas on the map. As might be expected, the principal group surrounds London, making a ring complete except for the large Eastern side comprised in the county of Essex (which, however, has constituted regional committees), with areas running along the Thames up and down, and beyond to the Kentish coast. There is

also a non-contiguous group in the Lancashire-West Yorkshire industrial region, together with the great Liverpool and Newcastle areas. In addition, the beautiful country of Cornwall, of the Southern Lake District, of the Bath region, and of the Sussex South Downs, have been considered and reported upon from the viewpoint of characteristic scenic value, much as the town planning reports for Stratford and Oxford have pointed to the preservation of precious historic traditions.

In the North-East Kent report before us the town planning consultants, Adams, Thompson & Fry, have paid full attention to the aspects of amenity in this predominant rural and historic region,—the country of the North Downs, of Watling Street, and the Great Way from Dover to Salisbury,—and have worked recommendations of this nature into their comprehensive scheme for roads, open spaces, and zoning, including industrial areas largely on the Thames and its tributaries. The consultants have followed the general form of their earlier reports on those other portions of the great circle around London for which their advice has been sought,—West Middlesex, Thames Valley, Mid-Surrey, and so on.

The folded map on which the plan proposals are shown is exceptionally instructive and well presented; and the whole report reflects credit not only on the consultants but also on the Local Authorities—complete for the area with the exception of two—that combined to procure this regional plan, which we hope will be carried forward in a progressive and orderly way.

T. K. H.

BRISTOL AND BATH REGIONAL PLANNING SCHEME. Prepared for The Bath and Bristol and District Joint Regional Planning Committee. By PATRICK ABERCROMBIE and BERTRAND F. BRUETON. The University Press of Liverpool *and* Hodder & Stoughton Ltd., London, 1930. 167 pages. Illus., plates, maps and plans (many of them colored), diagrams, cross sections, etc., with separate portfolio of folded maps. $12\frac{3}{4} \times 10\frac{1}{4}$ inches. Price 21s.

This most sumptuous of all the regional plan volumes yet issued in England is entirely worthy of the dignity of historic, architectural Bath and the commercial success of the flourishing port of Bristol. We have before us an exceptionally complete picture of the region, historically and topographically,—in word, map, and picture,—as well as a survey of present communications, activities, administration, public services, and population, together with an arraignment of the disfigurement which is “the legacy of the industrial age.”

Based on this exhaustive survey, the authors then present their plan for the region, allocating the various “character” (or use) zones, and laying out main routes of communication, systems of public services, and open spaces for parks and forests.

In the third and fourth sections of the report, the effects of the proposed regional plan are frankly discussed, in relation to methods of development and to particular areas, and the administrative steps necessary to realize the regional plan are indicated, together with a discussion of the voluntary support essential for its success. In this category are the advisory panels for architectural control already initiated by the Council for the Preservation of Rural England, of particular interest for Bath where there exists a recent legislative background for a certain degree of esthetic regulation.

The really magnificent series of illustrations and maps (including the large-scale series in portfolio), taken in conjunction with the pleasant typography of this extensive work, are in themselves enough to convince the reader of the importance of the survey and plan represented. But when to these is added the sympathetic interpretation of English landscape and English tradition, of regional life and regional promise, which Professor Abercrombie has always stood for, we have a book of more than local value and more than ordinary significance. The commercial value of beauty and orderliness and the contribution of these to material success are here embodied in a distinguished and enduring fashion.

T. K. H.

BUILDING AND LOAN ANNALS, 1930. Chicago, U. S. Building and Loan League. 751 pages. Illus. $9\frac{1}{4} \times 6\frac{1}{2}$ inches. Price \$10.00.

This first edition of the Building and Loan Annals contains the proceedings of the forty-second annual convention of the United States Building and Loan League as well as the substance of the most important addresses presented at state league and group conventions. It is more than an indispensable record for building and loan people, for it presents concrete evidence of the service being rendered by building and loan associations throughout the United States, which should interest every one concerned with the planning, construction, or financing of houses.

H. K. M.

ANNALS OF REAL ESTATE PRACTICE, 1930. Chicago, National Association of Real Estate Boards. 911 pages. Illus. $9\frac{1}{4} \times 6\frac{1}{4}$ inches. Price \$7.50.

The direct interest of realtors in city planning is shown by the large number of papers devoted to city planning subjects in the 1930 edition of the Annals.

"Can Blighted Areas be Rehabilitated" by Harland Bartholomew, "The Subdivider and the City Planner" by Jacob L. Crane, Jr., "Methods of Reducing the Cost of Housing" by Ernest P. Goodrich, "City Planning and Street Widening" by Mark Levy, "Modern Trends in Subdividing" by W. C. Miller, and "The Assessment Problem in California" by W. L. Pollard, are papers on subjects of importance to both realtors and city planners.

Many special articles on real estate subjects and informative addresses on problems of real estate practice, as given at the Association's Toronto convention and at the Phoenix mid-winter meeting, are included in the volume.

H. K. M.

INDUSTRIAL RELATIONS IN THE BUILDING INDUSTRY. By WILLIAM HABER. Cambridge, Harvard University Press, 1930. 593 pages. Tables. 9 x 6 inches. Price \$5.00. (Wertheim Fellowship Publications III.)

City planners who as engineers, architects, or landscape architects are concerned with the building industry—as, for example, in the development of low-cost housing—will understand, after reading this book, why building-labor costs are so high. The reduction of these costs is not a one-man job, but a general understanding, on the part of all those concerned, of the problems involved and of the possible methods of solution is an essential first step.

Instability in the relations between labor and employers has added immensely to the cost of building. Mr. Haber pictures the background out of which have grown both labor unions and employers' associations, analyzes the elements of unrest, and discusses methods which have been of value in securing industrial peace in the building trades. The book is exceptionally well written and readable.

H. K. M.

THE GOVERNMENT OF METROPOLITAN AREAS IN THE UNITED STATES. Prepared by PAUL STUDENSKI with the assistance of the National Municipal League Committee on Metropolitan Government. National Municipal League, 1930. 403 pages. 9½ x 6¼ inches. Price \$3.50.

In the solution of such problems as transportation, traffic, water supply, and sewerage, city planners have long realized that local governmental boundary lines in metropolitan regions have little significance. The regional planning movement, ignoring political boundary lines, is a result. It is easy to plan in this manner, but it is exceedingly difficult to translate these regional plans into accomplishment when the task must be performed by many independent governmental authorities. Some kind of unified government is necessary.

This timely report of a four-year study of the government of metropolitan areas (the first comprehensive investigation of its kind in the United States) is an important record of what has been accomplished to date. Seven different types of metropolitan governmental organization are investigated: (1) inter-municipal coöperation and exchange of services, (2) consolidation and annexation under a unitary form of government, (3) city-county consolidation and separation, (4) expansion of county government, (5) special metropolitan

commissions, (6) the New York borough plan, (7) the federated city or region.

Examples of each of these types of organization are analyzed and the aspects in which each is a success or failure are noted. In addition, the author discusses some of the more important governmental plans which have been proposed but not adopted. The conclusions are very brief and an obvious lack of careful proof-reading is somewhat annoying, but packed between the covers of this important study is a wealth of information on metropolitan government.

H. K. M.

OTHER NEW PUBLICATIONS RECEIVED

American Academy of Political and Social Science. The Annals, Volume 155—Part II: Zoning in the United States. Edited by W. L. Pollard. Philadelphia, the Academy, May, 1931. 230 pages. Plans, charts, tables.

To be reviewed.

American Electric Railway Association. Bibliography on street and highway traffic. Revised edition of Bulletin No. 305, issued April 1, 1930. Contains a complete index of the Association's library on street traffic literature, including traffic surveys, general publications and periodical references. New York, April 1, 1931. (A. E. R. A. Bulletin No. 355.)

Edmonton, Alberta, Town Planning Commission. Interim report on a major street plan for the City of Edmonton, Alberta. December 1, 1930. Mimeographed. (John F. D. Tanqueray, town planner.)

Heydecker, Wayne D., and W. Phillip Shatts. Community planning: a manual of practical suggestions for citizen participation. New York (400 Madison Ave.), Regional Plan Association, Inc., February, 1931. 46 pages. Mimeographed.

Lindsay, George F. Report of the State Building Commission to the Forty-seventh Session of the Minnesota State Legislature, 1931. (Statement in connection.) Saint Paul and Ramsey County Capitol Approach Committee. See p. 193 of this issue.

Meadow Reclamation Commission (New Jersey). Report of Meadow Reclamation Commission, appointed under joint resolution no. 8 of the Legislature of the State of New Jersey, session of 1930. 75 pages. Maps and plans (folded and colored), tables.

Mexico, Ministry of Communications and Public Works. National planning law, July 12, 1930. (Publications of The Ministry of Communications and Public Works, Mexico, D. F., 1930.)

- Mitten Management, Inc.** Philadelphia traffic survey, report no. 7: South Philadelphia. Philadelphia, May, 1931. 23 pages. Maps and plans (part colored, part folded).
- New Jersey State Regional Planning Commission.** Regional government; second annual report to the Legislature of New Jersey, February 10, 1931. 23 pages.
- North Jersey Transit Commission.** Rapid transit, annual report, 1931. 11 pages. Mimeographed. Folded plan.
- Oklahoma City, Okla., City Planning Commission.** The city plan for Oklahoma City: report, 1930. Oklahoma City, Okla., City Planning Commission, 1931. (Hare & Hare, city planning consultants.)
- Pennsylvania Housing and Town Planning Association.** Housing in Pennsylvania: report, 1929 and 1930. Philadelphia (Room 803, Allman Building, 17th & Walnut St.), 1930.
- Pepler, G. L.** Twenty-one years of town planning in England and Wales. A paper read before the Town Planning Institute on the 12th December, 1930. And the discussion thereon. London, Town Planning Institute. Price 1 s.
- Perth, Western Australia, Metropolitan Town Planning Commission.** Report, December, 1930. Perth, Fred. Wm. Simpson, Government Printer, 1931.
- Philadelphia Zoning Commission.** Report on tentative zoning ordinance. City of Philadelphia, Pa., April, 1931.
- Phoenix, Ariz.** Zoning ordinance and zone map of the City of Phoenix, Arizona. Adopted June 25, 1930. Price 35 cents.
- Saskatchewan, Department of Municipal Affairs, Town Planning Branch.** Zoning, its implications and objectives, by Stewart Young. Published by direction of the Hon. Howard McConnell, Minister of Municipal Affairs. Regina, Roland S. Garrett, King's Printer, 1931.
- Theobald, A. D.** Financial aspects of subdivision development. Chicago, The Institute for Economic Research, 1930. Price \$1.50. (Studies in Land Economics, Research Monograph No. 3, Richard T. Ely, Editor.)
To be reviewed.
- Unwin, Raymond.** Interim report on decentralization. London, Greater London Regional Planning Committee, January, 1931. Price by post, 8 d.
- Youngstown, Ohio, City Planning Commission.** A ten year budget of city improvements. January, 1931.

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CONTRIBUTING EDITORS

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SAINT PAUL'S BUSINESS DISTRICT
A retouched photograph showing the Business District as it will appear in the near future

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VOL. 7

October 1931

No. 4

SAINT PAUL MOVES FORWARD

By The Honorable GERHARD BUNDLIE

Mayor of Saint Paul

FROM the common-sense point of view, there are two basic questions involved in the matter of city planning:

What things does the city most need?

How can these needs be met without unduly burdening the taxpayer?

The first question can be answered aright only after careful consideration has been given and expert opinion secured. Then, when it is so answered, a master plan incorporating the needed things should be formulated,—a plan based upon a proper sense of values and a recognition of the necessity of coördinating the various activities of the city. Such a plan, of course, will remain but a plan, if it be not translated into action through the agency of a long-term, budgeted program.

St. Paul's experience is a case in point. Our City Planning Board, made up of private citizens and public officials, has done excellent work. It has been highly fortunate in having as its Managing Director, George H. Herrold. In 1920, under his guidance, the work of preparing a "Plan of St. Paul" was started, and in 1922 it was completed. That same year, the plan of zoning incorporated in the master plan was adopted by the City Council over the objections of those who could see no good or value in zoning. Many who opposed the plan have since realized their mistake. Our citizens, thanks to the valiant efforts of the Board, have become "planning conscious."

1a

After the completion of our city's master plan, several streets were widened and extended in accordance therewith, but because of the lack of a financing program the plan, for the greater part, remained but a plan until 1927, when the United Improvement Council, composed of public officials and representatives of our civic, labor, and service clubs and associations, was organized. This organization—truly a cross section of St. Paul citizenry—formulated a comprehensive, coördinated, permanent improvement program, using as a basis the 1922 plan. It not only included specific improvement projects to be completed over a period of five years at a cost of approximately \$15,000,000, but it also adopted a plan for financing them without unduly burdening the taxpayers, thus answering both of the basic questions above set out. In November, 1928, this program was approved by the electorate by an overwhelming vote.

PROJECTS IN THE IMPROVEMENT PROGRAM

We are now going rapidly forward with the work of completing that program. Space will not permit my setting forth in detail the many projects. Several streets leading to and from the heart of the downtown business zone have been widened and improved; a long viaduct over railroad tracks and yards and extending from the Dayton's Bluff district to the loop district has been constructed; historic Third Street has been converted from a back alley to a beautiful esplanade overlooking the Mississippi River; jogs in streets have been eliminated and our highway system in general has been improved. To our school plant many new buildings have been added and our parks and parkways extended and developed. An addition to our municipal auditorium which will have all the necessary facilities for conventions large or small and in which provision will be made for the holding of exhibitions and the playing of hockey will be completed in December of this year. Work is going forward on the new \$4,000,000 court house and city hall building, which will tower some nineteen stories in the air. Everywhere is to be heard the music of industry, and it is exceedingly pleasing to note that all of these public improvements are being made in accordance with a well-considered plan.

Our experience has demonstrated the wisdom of having a plan and of assuring through long-term and wise budgeting the carrying out of that plan. It is of interest to note that the unemployment problem here is not serious, that private enterprise has been en-



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couraged, and that the activities and energies of our people generally have been stimulated.

Several projects in the 1922 plan remain. They are being considered now by the Planning Board. We have realized the truth of the statement so oft repeated: "Plan your work, then work your plan"; and because of that realization, we shall continue to press steadily forward along the path of worth-while achievements.



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This building is now being constructed

CITY PLANNING IN SAINT PAUL

By GEORGE H. HERROLD

Managing Director, The City Planning Board

THE "Plan of St. Paul" was prepared during the years 1920-1922. The zoning plan was adopted by the Council in August, 1922. The thoroughfare plan has never been adopted but has been followed very closely when streets have been widened and extended. The civic center plan, prepared by Mr. Cass Gilbert in 1907, was incorporated into the plan of 1922 in so far as capitol approaches are concerned, but the growth of the city and the development of the business center have required a separate grouping of state and city buildings.

PUBLIC BUILDING GROUPS

The state capitol site was selected by a state commission in 1894. Mr. Gilbert's plans for the grouping of buildings and the capitol approach were worked out on the axis of the capitol and along Wabasha Street toward the business district. Careful study of this arrangement was made by our consultants, Messrs. Bennett and Parsons of Chicago, in 1921.

In 1931 Mr. Cass Gilbert was retained to assist in the location of the new state office building in harmony with his capitol approach plan and to study the situation in regard to a grouping of state buildings. This study resulted in a plan for a modified grouping of buildings in the vicinity of the state capitol. The plan was presented to the legislature early this year and the state office building was located in accordance therewith. This act of the legislature is more far-reaching than may appear on the surface for many have thought that the capitol approach plans were too elaborate to be carried out, and many could not visualize this approach from Seven Corners to the capitol building.

With a beautiful capitol building in French Renaissance style and a very fine plan for the development of grounds and the future grouping of buildings, it would hardly seem possible that any commission would recommend as a state office building a brick struc-

ture 278 feet long and 220 feet wide to be located across the street from the capitol and on higher ground. But this is what the State Building Commission first recommended, their contention being that an office building was a purely utilitarian structure and should appear as such. The Planning Board put up the greatest fight in its existence (probably as great a fight as has been waged in a civic matter in any city). The Commission finally agreed to face the building with granite. But the location, as well as the architecture of the building, was absolutely wrong. The building was to be placed on ground that had been acquired to prevent the construction of an apartment house. Also, since it was to be placed on higher ground, the view of the capitol from the business district would be silhouetted against this enormous office building. The fight continued for over a year. The State Building Commission finally relinquished its right to select the location and referred the matter to the legislature. The legislature by a vote of 170 to 6 determined the location of the building in accordance with Mr. Cass Gilbert's grouping of state buildings.

The site of the state office building (land for which has been acquired within the last two months) lies to the southwest of the state capitol and directly opposite the previously constructed state historical library, which is southeast of the capitol. This establishes the axis of the capitol and makes possible the completion of the circus, one block of which was constructed by the City last year.

The subsequent development of the city and the growing demand for a wide marginal esplanade along the riverfront have made it necessary to plan other building groups. Consideration has been given to the fact that such social service and business buildings as the post office, customs house, city hall, court house, central public library, union depot, and auditorium must be near the business district. Public sentiment is in accord with this idea. In 1928 when the land and buildings were acquired for clearing the riverfront for five blocks contiguous to the retail district, the new city and county building was definitely located at Wabasha and Third Streets, and the customs house and post office at Jackson and Third Streets, on the Third Street Esplanade.



Photograph by Northwestern Photographic Studio, Inc.

THIRD STREET ESPLANADE

The area at the right of the double roadway is being developed as a formal parterre

THOROUGHFARE PROJECTS AND STUDIES

The land and buildings for the Third Street Esplanade were acquired at a cost of \$1,560,495. Of this, \$598,449 were assessed against the business district from Third to Seventh Streets and the balance paid from funds provided by the County. The property on the north side of Third Street was assessed \$110 per front foot, and the property on Seventh Street \$5 per front foot with a graduated assessment on Fourth, Fifth, and Sixth Streets. Forty-three buildings were removed and six fronts set back.

In 1913 the city widened Robert Street for eleven blocks at a cost of \$1,000,000. It was originally a 55-foot street and it was proposed to widen it sufficiently to provide a 55-foot roadway and two 12½-foot sidewalks. This very excellent cross section, however, was not attained. Property owners and building managers held the widening down to a 20-foot strip on one side,—the new street being developed with a 49-foot roadway, double-track car line, and 13-foot sidewalks. All interests have been disappointed in the traffic-carrying capacity of this street and the increase in property values. It is very easy now to look back and explain the causes of these difficulties. The cross section of the street was not sufficient to provide for six lanes of traffic, and instead of erecting new buildings along the widened side of the street, new fronts were put on very old buildings and then rents were increased.

The first project carried out by the City Planning Board after its completion of the comprehensive city plan was the extension and widening of Robert Street, connecting it with University Avenue and making it a thoroughfare from the business district of Minneapolis to the business district of St. Paul. Following this, South Robert and Concord Streets, leading to the South St. Paul packing industries, were widened from 60 feet to 80 feet for a distance of two and one-half miles.

Many minor projects such as expansion of intersections and the removal of jogs were carried out. A campaign to change the city's standards from 10-foot-radius curbs at corners to curbs using a 20- to 26-foot radius where possible was very successful. The Planning Board has made elaborate studies of desirable widths of

streets. Every street cross section should be designed to fit the zoning. In a wholesale or warehousing district we have found a 56-foot roadway with 10- or 12-foot sidewalks very efficient. In a retail district the 56-foot roadway and 15-foot sidewalks have proven their worth. In a residential district a 27- or 36-foot roadway, with 6-foot sidewalks and 14- to 18-foot planting strips are satisfactory. Parkways, arterial streets, and express highways, of course, must be designed for their particular purposes and locations.

The city planning street projects, either completed or under way, are shown on page 223. When this program is completed in 1933 we shall have widened or extended 18.8 miles of streets.

UNITED IMPROVEMENT COUNCIL

In 1927 a selling organization, called the United Improvement Council, was formed. This group worked out a plan for a \$15,-000,000 bond issue for financing necessary city improvements. The plan was approved by the people by a vote of three to one at an election in November, 1928. The United Improvement Council operated through committees,—one on Highways, another on the Civic Center, etc., with a member of the Planning Board on each of the principal ones. The reports of these various committees were submitted to a Correlating Committee composed of chairmen of committees and five financiers and business men, who selected from the committee reports the projects that should actually be done. That 90 per cent of the projects included in the Correlating Committee's report were Planning Board projects testifies to the sufficiency of the "Plan of St. Paul." This program is now underway and will be completed in 1933. Planning a thing and selling it are two separate functions. The United Improvement Council was a necessity and has proved its worth in providing a five-year financial program of city improvements.

TRANSIT STUDIES

The most recent activity of the Planning Board has been a transit survey and plan for the rerouting of street cars to fit the building and street widening program. This plan has been completed and presented to the Council. Of five major changes proposed, two have been adopted by the Council and ordered to be

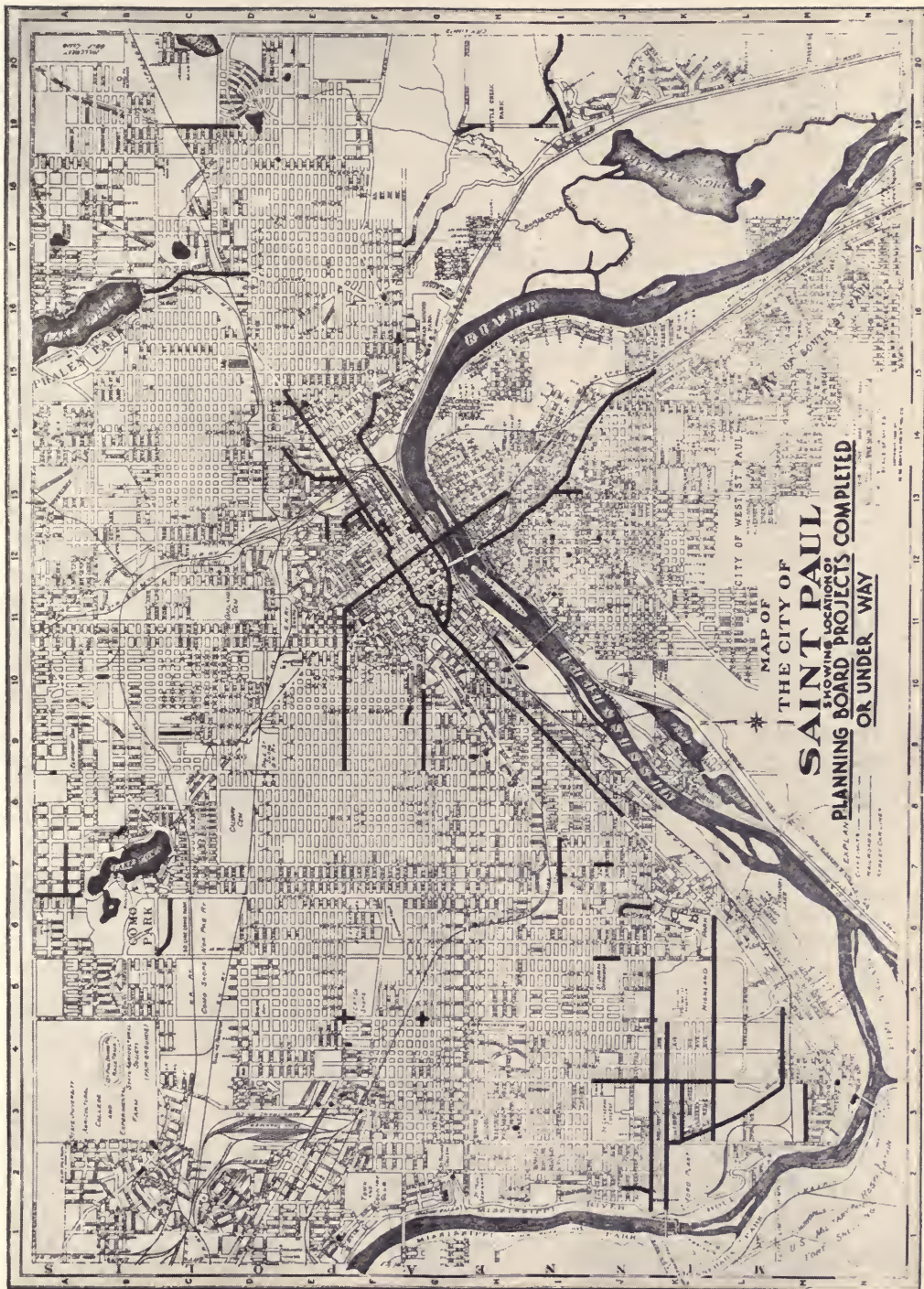
put into effect. The changes in the street-car routes were proposed in order to segregate and simplify the traffic of the downtown business district. Automobile and street-car routes are placed on parallel streets, thus giving both automobile and street-car riders an opportunity to reach the business district and trade at their favorite stores with much less congestion. The plan provides better facilities for all classes of shoppers. It was fought bitterly by vested interests and certain retail stores. Naturally the plan will have to be carried out in its entirety to get the full value of the public expenditures that are being made.

ZONING

The zoning ordinance has proved to be a superior piece of legislation. While we have no legally constituted board of adjustment, we have a Board of Zoning, created by ordinance and consisting of the Zoning Committee of the Planning Board and the City Architect. It holds weekly hearings on appeals and on petitions for amendments and advises the Council in each case. The zoning ordinance had never been taken into court in whole or in part until recently. The State Enabling Act provides that the City Council must have a petition of acquiescence of the owners of two-thirds of the parcels of real estate within 100 feet of land proposed to be changed by an amendment to the zoning map. A citizen who wished to rezone his property from "C Residence" to "Commercial" was unable to obtain a petition of acquiescence and mandamused the City on the grounds that the delegation of this authority to residents in the vicinity was unconstitutional. The District Court has upheld the constitutionality of the Enabling Act, and there does not at the present time appear to be any indication of an appeal.

PARK ACQUISITIONS

The Planning Board has been instrumental in two very meritorious park acquirements,—Highland Park of 244 acres and Battle Creek Park of 60 acres. Highland Park cost \$425,762 for the land and buildings. This cost was assessed over a benefited dis-



trict of 4300 acres. The Assessors' true value of the benefited area was \$67,000,000, so the cost of the park was two-thirds of one per cent of the value of the district assessed.

In the acquirement of Battle Creek Park, there was some delay in financing it and owners ruthlessly began to cut the timber. A public-spirited citizen stepped in and purchased 25 acres and gave it to the city. The balance of the land was acquired the following year out of park funds.

The city is now served with Como Park, a horticultural park, on the northwest; Highland Park, a golf course and picnic grounds, on the southwest; Phalen Park, swimming and athletics, on the northeast; Battle Creek, arboretum, on the southeast; and Cherokee Heights Park and picnic grounds on the south. Park lands including parkways and neighborhood parks total 2200 acres.

St. Paul lost its leadership when James J. Hill, empire builder, died. It began to lose its spirit when Minneapolis forged ahead of it in population. It has regained both leadership and spirit within the last few years. As the automobile has taken its place in the transportation scheme the problems created by it have been recognized by the younger business element of the city and they have set out to solve these problems. The public construction program has encouraged and stimulated private building. High-grade structures, totaling several millions of dollars in value, are now being erected. As the city has grown in culture and wealth, there has been more interest in the expression of these things in fine physical developments and less excitement about population figures.

City planning is an everyday affair in this city. Using the plan of 1922 as a basis, every suggested improvement is scanned to determine its relation and influence on the plan. If it appears to improve the plan, it is given the most careful consideration, but if it is less meritorious, then it is fought to the last ditch. The Planning Board is inclined to believe more and more in that basic thought that the coördination of municipal functions is city planning, and that the most important word in the sentence is "co-ordination."

BETTER ZONING FOR EASIER ADMINISTRATION

By RUSSELL VAN NEST BLACK

THIS paper¹ will diverge somewhat from the usual discussion of zoning administration, confident that there is something in that old saying about "an ounce of prevention." The first essential in successful zoning administration is an *ordinance* which is reasonable, understandable, and applicable to the peculiar requirements of the community concerned. From first to last it must be recognized that the zone map, establishing district lines, is of as much significance and importance as the wording of the ordinance text. This map should be adopted only after very thorough study which in my opinion should extend to the preparation of a comprehensive master plan.

Much of this may seem trite and to be taken for granted, and yet I venture to say that a very large proportion of the zoning ordinances now in effect in this country fail in one or more of these particulars. Undoubtedly many of the difficulties of administration arise from deficiencies in the original ordinance and zone map, growing out of insufficient care and experience in their drafting.

A large number of appeals may or may not mean an ill-adjusted zone plan. Appeals may spring from a known habit of leniency upon the part of the board of adjustment or may come from a public too little educated in the real purpose and value of zoning. On the other hand, few appeals do not necessarily mean a good ordinance and plan. Most of us have heard zoning administrators say that their ordinances were giving them no trouble, that they had almost no appeals and no court cases. This would suggest either perfection of ordinance and plan or sheer ineffectiveness. Zoning has made rapid strides during the past few years, but I am sure the most enthusiastic zoner is not yet prepared to claim perfection for any of his handiwork.

¹Delivered at the Westchester County Planning Conference Meeting at White Plains, N. Y., Apr. 22, 1931.

DANGER IN COPYING ZONING ORDINANCES

I have suggested that the individuality of a community must be given much consideration in zoning and that the zone plan is of greater significance than oftentimes regarded. It may not be true of Westchester County municipalities and I am inclined to believe that it is not, but in spite of the warnings of all authorities many cities throughout the country are still pinning their faith to ready-made or second-hand zoning ordinances. In the course of nearly fifteen years of study of city plans the writer has yet to find two communities where anything like identical ordinances would apply. Variation in size, character, and occupation of population, terrain, climate, relation to other cities, traditions, and many other elements comprising the individuality of a city, all enter into the making of a satisfactory and truly effective ordinance.

I presume it is rare for any city to adopt verbatim a zoning ordinance of another municipality. But the piecing together of an ordinance from the parts of a half-dozen others collected at random does frequently happen, and in the piecing many things occur to complicate administration.

CORRELATION WITH CITY PLAN

It is probable that zoning administrators in recounting their troubles may find significance in the fact that there are roughly 900 zoning ordinances in the United States and only about 240 comprehensive master city plans. Some years ago the writer asked a number of professional planners and zoning administrators whether in their opinion zoning should be regarded as simply one part of the city plan to be done with a comprehensive plan study as basis. All but two or three men out of more than twenty were emphatic in their statements that zoning and general planning studies should be so correlated.

There are two important reasons why this procedure is desirable. First of all, zoning is a serious matter. Bad zoning is worse than no zoning. No community can have too much information about its past growth, its present character, and its probable future development. The sort of thorough analysis and study which should be given to general plan-making is conducive to more in-

telligent and more successful zoning. One of the arguments of the remaining opponents of zoning is that zoning interferes with healthy and normal growth. This cannot be true if zoning is based upon a thorough appraisal of form, character, and probable trend of desirable expansion.

The master plan will indicate desirable traffic movement. It will show imminently-needed thoroughfare improvements which will facilitate the handling of traffic and be instrumental in redirecting traffic flow. Both the movement of traffic and the relative accessibility of various areas, as determined by existing or probable future streets, have bearing upon the allocation of business and industry. Less directly they affect the relative desirability of various locations for the different types of residence. It is difficult to see how the most workable zone plan can be evolved without first finding out all there is to be known about the traffic movement in a city and without determining in advance how traffic flow is likely to be affected by future street improvements.

Potential changes in railroad location and in distribution of public buildings, schools, and parks all have their important influence upon the most desirable use of land. It would seem self-evident, therefore, that the more such information can be made available and the more definitely the direction and kind of future growth can be predetermined, the better the zone plan and ordinance will be and the more easily administered will zoning become.

Some planners have suggested that general plan studies be made as a part of zoning whether or not the broader planning features are recognized or adopted. It isn't sufficient simply to make such studies as an aid to good zoning and then forget about them. They, too, must see the light of day. They should be adopted as a guide by both planning commission and city administration so that the two projects may develop hand in hand, each with intelligence of the other.

If a general plan must be made as a basis for sound zoning then it should not be tucked away in a pigeonhole to gather dust. It costs but little more to develop such studies to the point of an acceptable master plan. If zoning has been based upon provisions

and conclusions of these plans and the plans are forgotten, then all the finer adjustments of the zoning ordinance made possible thereby, become meaningless.

ZONING AND PLANNING BY SINGLE COMMISSION

To the end that zoning and the other phases of planning may be properly correlated, it is desirable that planning and zoning be done by one and the same body. Legislation providing for separate zoning commissions and city planning commissions is misleading, and tends to encourage divorce of these desirably inseparable functions of city government. The 1930 New Jersey Municipal Planning Enabling Act makes fortunate provision in this respect. A Zoning Enabling Act of 1928 provides for the creation of zoning commissions. The 1930 Planning Act is intended primarily to provide for the preparation and administration of master and official plans but contains a clause which permits the planning board to operate as a zoning commission with the full authority of the 1928 Zoning Enabling Act. Where enabling acts do not specifically provide for such broadening of the function of planning commissions, next best results might be obtained by appointment of approximately the same personnel to both zoning commission and planning commission.

It may be that I seem to overstress this question of interrelation between zoning and the master plan, and yet there are those who contend that a city may be so planned as to almost completely obviate necessity of zoning,—certainly in so far as use districting is concerned. They have in mind a new town where all the streets may be laid out and all the land divided according to intended function. Street alignment and street widths, block and lot sizes, and location would vary according to their intended use for residence, business, or industry. They contend that in a city so planned, an industry or a business would be so handicapped by location on a residence street that the probabilities of its straying from the area intended for it would be remote. Other areas would be similarly and automatically protected from extensive misuse. Zoning would be needed in such a town only to curb the occasional ill-advised business, to guide the use of the individual

lot, and to control height and density. If it is true that many of the purposes of zoning can be accomplished through such planning for function, then it follows that the better any city is planned, the easier and more satisfactory becomes zoning administration.

ZONING AMENDMENTS

Changes in zone plan and ordinance are as important to successful zoning as preparation of the original draft. Recognition of the city plan should carry through the administration and evolution of the zoning ordinance. Major changes in ordinance and changes in districts should not be made except after reference to the planning commission for study and report. The planning body, whether it be a planning commission or a zoning commission, should be perpetuated and kept active. There is frequent tendency to leave zoning amendments and rezoning to boards of adjustment. Such boards were never intended to serve any extensive planning function. They are essentially administrative in purpose, and beyond suggestion as to how the provisions of the ordinance may be adjusted for ease and clarity of action, they should not be called upon to initiate or perform the duties of planning.

Other difficulties are constantly arising from failure of boards of adjustment to recognize the limits of their duties and authority. Sometimes such duties are not clearly defined in the ordinance. Occasionally the board simply exceeds its authority. One such instance recently came to my attention. A petitioner asked for an extension of the height limit by possibly twenty per cent for no unusual reason and upon a street already congested and likely to become more so. The town was small and had no skyscraper, and I presume it seemed to the board that for various reasons one good high building might be an asset to the community. At any rate, the variation was granted. The board of adjustment was not measuring out relief in a case of undue hardship. It was authorizing a direct violation of the law for which it might be held legally responsible had any citizen wished to contest its action. It assumed authority to do a thing which rightfully could have been accomplished only by amendment of the ordinance by city council, and desirably only after approval by the city planning commission or

zoning commission. Similar cases occur with alarming frequency. They threaten the effectiveness and legal stability of zoning. Once a board of adjustment begins to write such decisions into its records it roughens its road of administration. It becomes not a board of adjustment or appeals but a board for the granting of special favors,—which in effect will ultimately nullify the best of ordinances.

Zoning is the negative element of city planning. It is preventive and protective. It insures against disorderly building and overcrowding of houses. It is generally conducive to stability and good living conditions. But zoning, alone, will not inspire nor create a convenient city or a beautiful city, attractive to strangers and of pride to its citizens. This lifting of a city above the ordinary must come from the sort of creative thought that goes into the making and carrying out of a master plan. Zoning is not inspiring. Planning is. Planning helps the citizen to visualize a finer community. The sort of civic spirit needed for the perfect functioning of zoning can be developed only through this broader vision of growth and improvement. And for this further reason it would seem that the master plan must help to pave the way for smooth administration of the zoning ordinance.

THE NEXT STEP—MORE PERMANENT ZONING

Other difficulties with zoning may arise from failure to define clearly its purpose. One of the functions of zoning, frequently advanced, is that it predetermines the use of property, that it permits the paving of streets, the establishment of street widths, and the building of sewers, water mains, and other public service with a definite knowledge of what the use of a certain area is to be and of the number of people and the character of use to be served. This, however, has not been true. Up to the present time we have been unwilling or unable to carry zoning this far. Present-day zoning merely guides growth. It makes no attempt to limit growth or to hold expansion within definite lines.

It is our full expectation that, as the demand for apartment houses increases, more and more of the single-family residential districts will be thrown open to apartment-house use. Business

and industry may likewise encroach upon residential areas or upon each other as developments may require. This may be the proper procedure, and it may be that zoning will always operate in this way. But if so, zoning will never attain its utmost possibilities in preservation of the character of residential districts or in effecting important economies in public service.

It is certainly true that if fixed or permanent zoning were undertaken it would have to be based upon very exhaustive studies and well established principles which the art of city planning may not yet be in position to offer. I bring this up merely as speculation as to how the usefulness of zoning might be enlarged and as suggestion of one possible line of its future development.

There is no question but that zoning should be reasonably elastic. There must be provision for growth. But it is extremely wasteful and costly, time and again, to rebuild and enlarge sewers, gas mains, telephone and electric light cables, and street paving to provide for an ever-increasing density of population and intensity of use in a district which conceivably might be zoned once and for all to accommodate a given number of people. Most growing cities, particularly those near metropolitan centers, are constantly faced with apparently unreasonable requests for the extension of apartment-house areas into small-house districts with necessarily greatly increased burden upon all public-service facilities. If such pyramiding of density must be permitted, might not the taxpaying public be somewhat relieved by requiring the new uses to pay, by direct assessment, the cost of reconstruction and of inconvenience caused by their intrusion into territory not planned to receive them? This, too, is speculation, but it is worth thinking about. Zoning as a science has been marking time. Sooner or later it will move forward to do a better and more complete job.

TRADITION VERSUS LOGIC

Too often the effects of zoning upon the architectural appearance of cities are lost sight of in the preparation and administration of both zone plan and ordinance. Certain principles of zoning have been established through custom, which to-day do not stand up very well under the light of logic. For instance, it is the usual

practice to include two, three, four, or more residential districts in a zone plan. These districts vary according to density of development permitted and range from single-family-house districts with generous light and air requirements down to apartment-house districts with minimum yard requirements. We have assumed somehow that those people of poorer circumstances who must live in crowded quarters need less light and air for healthful living than do those fortunate individuals who can have a house and lot to themselves. We have assumed, too, that there is some sort of esthetic or economic stigma attached to two-family or four-family dwellings scattered through a single-family-house district. There may be instances where economic considerations, arising from our present conception as to what creates residential values, make it desirable to limit large areas to single-family houses. But to justify such districts upon esthetic or social grounds is difficult. The proper grouping of interspersed single and semidetached houses may give a much more interesting architectural effect than rows of single-family units. Socially, a party wall permits of more privacy and isolation than does the usual eight to twelve feet separating individual houses. By tying occasional houses together with party walls, all side yards may be increased in width to give greater distance between open sides of dwellings.

I do not suggest that we abandon our single-family districts but rather that we shift our viewpoint to recognize that there is nothing inherently bad or incongruous about a two-family and multiple-family dwelling in any district, providing such building is well designed and well located and has open space around it in proportion to its size and the number of people it is intended to accommodate. In many communities it should be possible to accomplish the purposes of residential zoning with one residence district by utilizing automatic open space requirements worked out in relation to bulk of buildings, leaving the question of number of families entirely out of consideration. By this control, the side and rear yards are increased in fixed ratio as the building increases in height, length, and depth. There would be no prohibition against the sixty-family apartment house, but the yard requirements would be so great that the apartment house would be so surrounded

by open space that its more objectionable features would be removed. The same principle applies to many kinds of institutions which cease to be objectionable if they have sufficiently spacious surroundings.

This kind of zoning seems to me to be more reasonable and more easily upheld than is much of the zoning law now in force. It should remove a great many of our present difficulties in zoning administration and, I am inclined to believe, would make for more interesting and less monotonous cities.

It may seem that I have gone far afield from my allotted subject, but to me the prerequisites of smooth zoning administration go beyond the machinery and methods of organization and procedure. Traffic engineering is a parallel problem. Too frequently the traffic engineer looks for his solution in the placing of lights, in the establishing of one-way streets, and in the various other devices for facilitating the current movement of vehicles. His real solution must lie in the arrangement and classification of streets and in the maintenance of a proper relation between street space and land occupancy. So with zoning, if the plan and ordinance are well prepared and based upon full knowledge and sound principles, difficulties of administration become insignificant.

ZONING BY DESIGN

This term is used for the purpose of calling attention to the possibility of making the administration of a zoning ordinance a more simple matter. It refers to that phase of land planning in which the street systems and lot layouts are such as to facilitate and render almost automatic the appropriate use of the various portions of the subdivision or the community. When this is done, it becomes possible to locate streets and highways, industry, business, apartment houses, homes, recreational areas, and cultural building sites so that the resultant community plan will have such carefully determined ratios between these different uses that the community design will be naturally and easily maintained for all time.—CHARLES H. DIGGS, *Annals of the American Academy of Political and Social Science*, May 1931.

PREVENTIVE PLANNING

By L. DEMING TILTON

Director of Planning, Santa Barbara County, Calif.

ONE of the trials of every planning commission is to have to explain occasionally why it exists. A county planning commission, because it is the very newest agency of local government, is likely to have many pertinent inquiries directed toward it.

What can a county planning commissioner say¹ in explanation of his presence in the circle of long-established county officials! How can he justify the diversion of even a small fraction of the taxpayers' money for the work of planning in the county?

Planning in cities has been accepted and is generally considered worth while largely because the wrecking of buildings to widen streets, the clearing of sites for new playgrounds in congested districts, the conversion of swamps into parks, and the elimination of dangerous grade crossings are convincing demonstrations of betterment. With "before and after" pictures the citizen is made to believe that planning pays.

The typical city plan generally has as one of its dominant features a program of corrective improvements. The city plan does not minimize the necessity of spending. In fact, the success of a city planning program is frequently measured by the amount of funds which the people can be "educated" to furnish for costly major operations. With a note of pride the Kessler Plan Association of Dallas says in one of its Bulletins that it was "chartered by the state as an educational organization. Its educational program was designed to reach all the people of Dallas city and county. In less than five years a million dollar program was under way."

It is the misfortune of many cities which have been growing for years without planning to find now that increasingly large expenditures are needed to fit them for present-day requirements. But it should never be said of any planning agency that it exists primarily to encourage spending. The taxpayers may rightly

¹A paper delivered at the Annual Meeting of the California County Planning Commissioners Association at Los Angeles, Calif., Mar. 13, 1931.

complain if it appears that the energies of the planning department are so concentrated in advancing a program of costly improvements that the less exciting but equally advantageous work of directing new growth along orderly, economical lines is neglected.

As many city planning commissions have discovered, however, the proposals which call for large expenditures get fire-whistle headlines, but the quiet, money-saving, preventive work which goes on from day to day does not receive a measure of acclaim in proportion to its importance. A county planning commission is likely to have to work for a long time under the handicap of having few spectacular remedial operations to use for publicity purposes. *This is because its special function and its great opportunity is to prevent mistakes and errors of omission in the development of the county which would require huge outlays at some later date.* The county plan must consequently emphasize the savings which can be effected by doing things right in the first place.

To be able to justify its existence and prove the need of adequate appropriations for its work, a county planning commission should be familiar with the experiences of those older places throughout the country where the economies of doing without planning were once fully enjoyed. The conditions which now require burdensome corrective improvements, popularly referred to as "city planning," in many instances had their origin in county territory in a not-too-remote past when truly effective planning could have been applied. The records show plainly that it is not the expense of planning that the taxpayer should complain about, but the high cost of being without it.

Mr. Herbert S. Swan shows¹ clearly how the taxpayers lose many desirable things because they prefer to save money on planning. He says:

A short time ago one of the progressive cities of the east appropriated two million dollars to widen a stretch of about 1000 feet of street originally laid out too narrow. . . . This narrow portion of street was a bottle neck to downtown traffic.

This street was originally laid out too narrow, because the city had never had a comprehensive plan. Because of past lack of planning, every man, woman and child now resident of the city is called upon to

¹"The New London: a report to the Planning Board, New London, Connecticut." 1928.

assume a debt of \$12.50 to widen this street. . . . Because this community had no plan, the taxpayers are called upon to assume for the next 30 or 40 years a debt burden of two million dollars.

Suppose that city had always had a proper plan, what could it buy with these two million dollars? A municipal auditorium. A new bridge across the river. A new library. A new high school. A new hospital. . . . But now, because of the shortsightedness of its forbears, the city will have none of these. These two million dollars will go toward the eradication of a single mistake committed in its planless growth.¹

Mr. Swan is merely one of a notable company of civic leaders, not all professional planning enthusiasts by any means, who are ready to testify that the planning which is of greatest value is that which is done before growth and development take place. Let some of these observers offer proof in their own words that preventive planning, such as counties and small growing cities are well able to do, is the very soundest governmental economy.

CORRECTING STREET FAULTS

Consider first, some of the experiences of the city of Los Angeles, which ten years ago was just beginning the remarkable growth that has made it one of the great cities of the world. The taxpayers have paid staggering sums to recover for public use precious bits of land that were open fields only a few years ago. Mr. W. L. Pollard, an attorney who is rendering notable service to the planning movement in California, has prepared some startling figures on the cost of "afterthought" street widenings. His statement follows.²

Literally hundreds of streets in Los Angeles city and county have been opened, widened and straightened at costs ranging into the thousands and thousands of dollars per mile. I give the cost of opening and widening primarily, and this for acquisition of land alone, and from these figures one may gather a fair idea of such costs:

Wilshire Boulevard from Figueroa to Grand, \$17,482,507 per mile, the most expensive opening in Los Angeles.

The five-finger plan, 4.9 miles, at \$1,107,141 per mile.

Eighth Street, Figueroa to Windsor, widening only, \$771,595 per mile.

Since the beginning of the City Planning Commission of Los Angeles, that commission has obtained dedication for public use of more than 200 miles of eighty-foot and 100-foot boulevards. . . . To have opened any

¹Many of the following quotations used in this paper have appeared from time to time in the Los Angeles County *Regional Planning Notes*, prepared by Mr. Bryant Hall.

²In *Los Angeles Times*, June 7, 1931.

of the streets by condemnation process would have probably required from \$25,000 to \$50,000 per mile and some of the streets so opened could not have been condemned for less than \$500,000 per mile.

In the last seven years, the Regional Planning Commission of Los Angeles County has obtained the dedication free of cost of 100 miles of major and secondary highways. The figures as to the smaller cities in Los Angeles County are not available but probably the total so dedicated would run to another 200 miles, giving a grand total probably of 500 miles of major and secondary highways, permanently dedicated to public use, logically located, properly laid as to grade and logically established. It will take only a moment to determine even at \$25,000 a mile the tremendous saving which has been made to the citizens of Los Angeles County by reason of the work in these two commissions over the past ten or twelve years.

The cost of the commissions themselves has been negligible in comparison. The maximum cost of the City Planning Commission for any one year was \$53,134 and at the beginning the cost to the taxpayers was about \$10,813, while the maximum cost of the Regional Planning Commission of the county was \$71,000 for any one year and the first year's budget ran \$3500.

Mr. E. A. Kemmler, Chief Engineer, Bureau of Highways, Akron (pop. 253,653), would report as follows:¹

The outstanding city planning accomplishment in Akron during the past year is the widening of the two main east and west thoroughfares from the central business district to East Akron. The length of the portions of these two streets being widened is over four miles and the cost will be about \$3,425,000, of which the city will pay 50 per cent from a bond issue voted in 1928. Buildings have been cut off or set back on most of the frontage, and more than a mile of widened roadways and new walks have been constructed. *By reason of the building lines that were established ten years ago, Mayor Weil states that the cost of widening these two streets will be less by about \$850,000 than it would have been if all buildings erected during the past ten years had been built out to the street lines.*

Mr. William E. O'Brien, City Manager of Kenosha, Wisconsin (pop. 50,262), has sent a statement regarding the experiences of his city in the establishment of building lines.

On the adoption of the major street plan we established setback lines for all streets proposed to be widened. The following is a brief summary of the buildings that have been set back:

Total number of buildings set back from 7 to 17 feet	83
Value of the 83 buildings set back	\$2,360,570.56

Inasmuch as these buildings are in the proper position for the widening of the streets, it seems to me that a considerable portion of this amount can be considered as an actual saving to the municipality for future work.

¹In *American City*, Jan. 1931.

In Des Moines (pop. 142,469) a persistent group of practical business men forced reluctant officials and property owners to open a wholly new, commodious artery to the heart of the city, a very logically located street that no one thought of incorporating in the pattern of the city in the early days. The story of this improvement is told by Mr. James B. Weaver,¹ an able attorney and Chairman of the City Planning Commission.

In 1916 in the center of the city and at the northwest corner of the central business district was an area about eight blocks in width and a mile long, difficult of access, and full of dead-end streets and inferior buildings. Through the heart of this district ran diagonally in earlier years a ravine known as Bird's Run. In October, 1916, the Town Planning Commission took definite action for the location through the entire length of the valley of a diagonal traffic way 100 feet in width. The Council approved the project, increased the width to 110 feet, created a benefited district to bear the cost, and proceeded with condemnation of the right of way. The cost, about \$900,000, assessed to a large area, has not been burdensome and resulted in few appeals. Keosauqua Way has been completed and already bears the heaviest traffic, with possibly one exception, of any street in the city.

If further evidence of the value of preventive planning is needed, one may find it in the work of the Milwaukee County Planning Commission, as reported by Mr. E. A. Howard, the Supervising Engineer.²

By obtaining wide right of ways at the time of platting and by keeping buildings back from street lines along narrow right of ways, the taxpayers of Milwaukee County are being saved many thousands of dollars. . . . The fifty miles of widened highways obtained to date by dedication through platting are worth at least \$1,250,000, which is many times the sum expended in obtaining these dedications, and many times the amount spent in the last five years on all County Planning activities.

In Santa Barbara County, there are numerous examples which illustrate the value of planning. In unincorporated Montecito, to cite one example, the existence of a zoning ordinance giving the County authority to issue building permits, put the planning commission in touch with men who were going to build a substantial store building opposite a reinforced concrete hotel which would have narrowed the highway at this point to a very objec-

¹In CITY PLANNING, July 1930.

²In CITY PLANNING, Oct. 1929.

tionable bottle neck. The existence of a planning agency and a building permit system in the county made it possible to persuade the builders to set their building back 40 feet from the present highway line, thus preserving a 100-foot right of way.

The state highway authorities can now purchase this property without buildings upon it and the 100-foot right of way, which was established by this generous 40-foot setback, will be maintained throughout the district. Thus timely action by a county planning commission with respect to but one building has established the width of a considerable stretch of highway and made possible large savings in its ultimate development.

BELATED PARK PURCHASES

The impression seems to prevail in California that the national forests, paved motor roads along the sea, the popularity of single-family dwellings, a high per capita ownership of motor cars, and similar factors make public parks in cities unnecessary. This delusion is especially common among the smaller, younger cities.

But these cities grow and grow, as if in direct answer to the boosters' prayers, and in time the harassed, motor-driven public comes to admit a secret yearning for a few pleasant, convenient open spaces, attractive in leisure time for rest and recreation. But the very growth of California cities which has made the necessity of parks more obvious has put them practically in the class of unattainable luxuries. Land values have become prohibitive and taxes for plain necessities are an increasing burden.

The cities of California, especially the great city of Los Angeles, with its concentration of population in vast, yardless apartment districts, will pay dearly for the lack of 10-, 20-, and 30-acre neighborhood parks. These green, tree-bordered pleasure spots should break the monotonous pattern of every square mile of the city. But it has grown so rapidly and with such interest in other things that the recovery of only a minimum of needed open spaces for recreation would cost between 45 and 50 million dollars.

And to create a complete system of parks, parkways, and recreation facilities that would reflect in adequacy and appoint-

ments the true greatness of the city would cost at least 200 million dollars. Yet these features could have been secured not many years ago for only a few hundred thousand dollars.

In 1900, Memphis had a population of over 100,000 but only 20 acres of parks. A group of influential citizens formed a park board, secured a bond issue, and bought two parks: Overton, 335 acres; and Riverside, 427 acres. They then acquired right of ways from 150 to 300 feet wide for a parkway 11.1 miles long. The route of the parkway encircled the city in what was then its sparsely settled outskirts. This initial effort was appraised by the writer as follows:¹

To acquire these three properties, the city had to issue \$250,000 in bonds. Their true value now is beyond computation; the land alone is conservatively estimated to be worth nearly four million dollars.

Set against this experience of Memphis the tragic consequences of shortsightedness in Glendale, a city that was filled with open spaces and available park sites only 10 years ago. It now has a population of 62,736. Mr. O. E. Renfrew indicates present difficulties in a letter recently received.

If a system of recreation areas, adequate to the present-day needs of Glendale, had been acquired ten years ago, the cost would have been about 10 per cent to 15 per cent of what it will be to-day, even under the present low level of values.

One definite illustration will show this, that of Verdugo Woodlands. The 40-acre "breakfast-club" site, less than seven years ago, was offered to the city for \$45,000. To-day it is held at more than \$10,000 per acre. The difference between \$45,000 and \$400,000 on this one piece of property would have brought practically all of the acreage necessary to constitute a complete system for present-day needs.

Let us shorten up this period of time and contrast conditions to-day with that of July 26, 1928, when the Bartholomew report was made. Five of the suggested areas then available are to-day encumbered with buildings, and practically out of the picture. Three years have more than trebled the cost of area!

It is difficult to see why any city or any county in California discounts the value of recreation areas. This state thrives on sports and out-of-door activities. A complete equipment of public parks and parkways will provide better advertising for any California community than carloads of the golden words woven together by advertising specialists.

¹"A Comprehensive City Plan, Memphis, Tennessee." City Plan Commission, 1924. (Harland Bartholomew, City Plan Engineer).

In other states a proper value is placed upon open spaces in the structure of the city. Consider what Minneapolis has saved by timely action. The beloved Superintendent of Parks, Mr. Theodore Wirth, says:¹

Minneapolis has 138 parcels of park land distributed almost evenly over the nearly 60 square miles of city territory. Out of every 100 acres of that city area, 9 acres have been set aside for the use of our people, and we have one acre of park for every 90 inhabitants. . . . The park boulevards encircle the entire city, connecting our larger park areas. We have preserved for the common use of all the people for all time to come our priceless spring-fed lakes of clear water, the gems of our city, the wooded gorge of the Mississippi River as it winds its way through our community; the valleys, falls, and glens of Minnehaha Creek; and the wooded hills, dales and meadows of Glenwood and Columbia Parks. We have transformed useless swamps into useful park lands for beauty and practical purposes.

From Richmond, Indiana (pop. 32,493), comes another bit of evidence of the value of forethought in the reservation of park lands. The City Engineer, Mr. D. B. Davis, has made this statement:²

Three years ago, the Richmond City Plan Commission secured options on all but one piece of land bordering a small creek just west of the corporation line. This land was low and mostly unsuitable for residences, but would make excellent park property. They knew it was but a year or so before the city would extend its boundaries, and this creek would act as the natural watercourse for the storm water for that district. That land was purchased for \$100 per acre, except one piece which had to be condemned at \$150 per acre.

If the city had not bought the low land where the creek flows, we would have been required to construct a storm sewer three-quarters of a mile long, approximately 6½ feet in diameter, to care for the drainage. In other words, the city secured 35 acres for a park, which lies in the center of a residence district, for approximately \$3500 and saved \$40,000 on a storm drain.

In South Vancouver, B. C., the writer came upon some figures that show in actual dollars and cents the beneficial effects of parks upon surrounding land.³

If there is any doubt that parks have an influence upon property values, it can be dispelled by an example from South Vancouver. Prior to the establishment of Prince Edward Park the municipality had scores of tax sale lots on the market in that district. The average price was

¹In *American City*, Aug. 1929.

²In *American City*, Apr. 1928.

³"A Plan for the City of Vancouver, British Columbia; including a general plan of the region, 1928."

\$150 per lot, with very few being sold at that figure. The park, 2.6 acres, was set aside from these municipal lands. Within a few months thereafter all the lots facing the park were sold at prices averaging \$340 per lot. Now sales are being made in other blocks near the park at prices correspondingly higher. The simple act of the council in setting aside that 2.6-acre park changed the character of the district and made property in the neighborhood more desirable and more valuable.

If any planning commissioner desires to know how a complete equipment of recreation areas is secured by a progressive city of moderate size, he need only examine the record of Great Falls,¹ Montana (pop. 27,000).

An excellent example of original planning for parks followed by continuous expansion is that of Great Falls, Montana. With an estimated population in 1925 of 27,000, the total area of the park system, exclusive of 37 miles of boulevards and driveways, is 686.4 acres. The selection of properties as to size and location has been admirable. There are 17 properties, exclusive of boulevards. These include 6 large parks of 48, 60, 81, 100, 100.8 and 240 acres, respectively, strategically distributed within and without the city limits; 5 neighborhood playfield parks comprising 5, 5, 8, 10 and 14 acres, respectively, and 6 neighborhood squares, 2½ acres each. A courthouse square of 2½ acres adds a seventh to the list of neighborhood parks.

This well-organized system of recreation areas has cost something, to be sure, but the land could never be acquired for less, the parks increase in value and add value to other land, and unlike sewers and public buildings and pavements, parks never wear out!

The time to secure useful and valuable parks and playgrounds is when land is first subdivided. Palos Verdes Estates, the most extensive and carefully planned residential community in California, will never have debts caused by the necessity of purchasing, as afterthoughts, inadequate, badly located, and costly park sites. It has 800 acres or 25 per cent of its area set aside for the use of its people.

DOES ZONING PAY?

It is not often that one can prove the monetary value of zoning. The clamor of vacant-lot owners for business classification to enable them to "get out from under" has prevented many planning commissioners from hearing other evidence that zoning is related fundamentally to the economic well-being of the city.

¹In U. S. Department of Labor, Bureau of Labor Statistics. Bulletin 462.

Mr. Harland Bartholomew, with his experienced eye, discovered the following effects in Saint Louis:¹

An interesting result has occurred west of Grand Avenue where on Lindell Boulevard a bitter controversy turned around an attempt to commercialize this fine, wide thoroughfare containing many beautiful public buildings and fine old residences. The recommendation of the City Plan Commission for apartment house development was approved and sustained by decisions of the Supreme Court of Missouri. The case was appealed to the Supreme Court of the United States but was withdrawn just before it was to be heard.

Property values on this thoroughfare have been less than \$100 per front foot. The proponents of commercialization urged as its justification that property values could be increased to \$200 or \$250 per front foot. With this the City Plan Commission agreed but felt that nevertheless it was more important to maintain the character of this, the most beautiful thoroughfare in all the city, rather than to spoil it with cheap stores and filling stations on the more important corners.

With the apartment house zoning finally sustained, values began to rise until sales have recently been made as high as \$800 per front foot. New apartment structures, worth from ten to twelve million dollars, have been built and plans announced for a similar building program. In justice it should be said that this result is far beyond the fondest hopes of the City Plan Commission and, of course, of the "practical" real estate men. It is an example of the fact that city planning sometimes pays larger dividends than might be expected.

From Chicago comes a similar bit of testimony from Mr. Henry G. Zander, one of the foremost realtors in the nation:²

When the Chicago Zoning Ordinance was up for public hearing, the majority of the owners along one residential street appeared before the board and protested against their property being permanently zoned for one-family dwellings. They called attention to the fact that the land as then used was worth about \$200 a foot; that land not so favorably located, and available for large apartment buildings, was selling at from six to eight hundred dollars a foot. . . . After the zoning was changed at the request of the owners, two or three of the older of the houses were bought and torn down, and large apartment buildings erected. This made the entire property less desirable for residential purposes, and the remaining owners, most of whom had modern homes, found that while they could get \$600 for their land, they could get nothing for their houses, and so, instead of having an increase in value, they had not only lost a desirable residential community, and their families insisted upon new locations, but their property could not be sold for anywhere near what it would have brought as residences, if the zoning had been permitted to remain unchanged.

¹In CITY PLANNING, July 1929.

²In "Annals of Real Estate Practice, 1929." National Association of Real Estate Boards, Chicago.

SAVING THROUGH GOOD LAND PLANNING

In the direction of land subdivision operations, the county planning commission has its greatest opportunity. If it can do nothing else than make and secure the execution of a well-designed plan of major traffic thoroughfares in newly developing communities, it will have laid the foundation for enormous savings in land values, travel time, and materials. If it can go further and secure through the coöperation of responsible realtors and subdividers a correct pattern of local streets and lots in the spaces between major highways, substantial savings and benefits will come to all future landowners and users of the lots and streets.

To bring into existence in new suburban and rural communities a correct pattern of streets and lots, however, requires something more than the simple act of approving or disapproving subdivision plans as they are submitted. The planning commission cannot expect to show the full advantage of comprehensive planning without being able itself to make good plans. A master plan having the authority of law behind it must be a good plan or it may be more costly than no plan at all.

This is illustrated in the results of a restudy of the famous Highway Plan of the District of Columbia. This official master plan was prepared in 1893. It cannot be changed except by Congress. Every landowner who subdivides must open streets as shown upon this plan, regardless of grades or resultant parcels of unsalable, unusable land. It is stated that:¹

The work of the National Capital Park and Planning Commission on revising the street system of the undeveloped parts of the District of Columbia, especially on replatting of gridirons superimposed on rough topography, is estimated to have saved the District at least \$3,000,000 in cost of future development, while another \$300,000 will be saved annually from the omission of unnecessary streets originally called for by the standardized block pattern.

The following significant statement is taken from a recent book on city planning.²

The economic losses suffered by municipalities prior to platting control, both through layouts inappropriate to the topography and through lack of continuity in the development of the street system, have been enormous. Platting control was accounted by many cities the most

¹In *CITY PLANNING*, Apr. 1929. "Brief Survey of City and Regional Planning in the United States, 1928." T. K. Hubbard.

²"Our Cities To-day and To-morrow." (T. K. Hubbard and H. V. Hubbard.)

profitable single result of city planning. It is estimated that in one plat in Ponca City, Okla., future property owners were saved \$50,000 on paving alone through the better type of plat approved by the Planning Commission.

The true value of competent guidance of land subdivision activities, however, is not always shown in dollars and cents. Confronted by the fact that 36.7 per cent of all automobile fatalities are among children under 15 years of age, the planners of America are trying to find new designs for land that will tend to cut down this appalling destruction of human life. Radburn, New Jersey, is a town being built for the motor age, in which no children going to the store or school will have to cross a traffic artery. The county planning commission must closely follow experimental work of this character. No other agency of county government is likely to be interested in such things.

In the end, the true value of planning in counties is found to rest upon two primary bases. First, the opportunities offered to create such wholly new towns and cities and suburbs as Radburn (New Jersey), Boulder City, Palos Verdes, Shaker Heights, the Country Club District of Kansas City, and other communities which plainly show, without parallel examples of what might have been, the enormous advantages of forethought and planning and adherence to a well-thought-out general scheme.

But even more obvious and convincing arguments for county planning are found in the opportunities offered to save the taxpayers billions of dollars in future years. Money savings, often more effectively than abstract considerations of health, happiness, or more comfortable human existence, will prove to doubters the worth of such work.

It is the second basis of the value of county planning, the savings that may be effected by preventing mistakes, that forms the principal theme of this paper. County planning can never be justified in the same manner as city planning. There will rarely be opportunities for impressive reconstruction and remodeling. County planning is not planning to spend, with hopes of speculative profits, and recoveries to pay the cost. It is planning to save. The work is done upon a clean slate and if done well will pay its own way every year in cumulative savings and benefits to the people of the county.



Courtesy of Board of Park Commissioners

LORING PARK AND LAKE, MINNEAPOLIS

THE ACQUISITION OF PUBLIC OPEN SPACES

By FRANK B. WILLIAMS

of the New York Bar

IN the construction of cities, land is the basic raw material. A most important task of the city planner, therefore, is the choice of the land suited to the different uses essential to city growth, and in order to choose wisely he must know the quality of that land. Land has different physical qualities: it may be level or hilly, dry or moist, fertile or sandy. These qualities the planner must know in order to choose land wisely for the uses to which he wishes to devote it. But, in addition to its physical qualities, it has characteristics imposed upon it by law, also most important to him in his task; and it is of the legal qualities of lands which may broadly be described as public open spaces that we are now concerned. There are many kinds of such spaces, of different degrees of openness, in which, in different ways, the public has acquired rights varying in intensity and kind. Let us at once proceed to pass these different spaces in review, in the course of which the more exact confines of our subject will appear.

PARKS

First comes the park. It is the most open of public spaces. Its sole purpose is to remain open, for the health, recreation, and rest of the public. It is true that buildings are allowed in a park, and businesses may be carried on in them, but only such as promote the primary purpose of the park, thus increasing its usefulness as an open space. Obviously a shelter from the rain, a pleasing statue or arch, a fountain, with or without a cover, add to the enjoyment of those who resort to the park as an open space; and the fact that the accessories of this sort may be inappropriate in design or execution, or so large and numerous as to be hindrances rather than aids, only shows that judgment may be mistaken and discretion abused.

DISTINCTION BETWEEN PARKS AND STREETS

A street is a public space, open but very different from a park. A street is a strip of land consisting of a roadway for vehicles, or a pathway for pedestrians, or both; in some cases with a strip of land on each side, or in the middle dividing the ways, in which may be trees, grass, etc., the entire strip being, legally, street. The purpose of a street is to remain open, not for rest and recreation, but for communication, much of which is for business purposes. Trolley cars, telephone and telegraph wires, sewer pipes, vehicles, and people are there. In it the owner of abutting land, in addition to his right of access as a member of the general public, has his rights as abutter, of access to and

from his land for himself and those whom he may invite, and of light, air, and view. In a park the abutter has no such rights, even where a park road runs along its outer boundary, although in such a case he is sometimes given access by contract, carefully limited. A park may, therefore, be shut off by a wall, with such openings only as the authorities see fit to make in it, and park buildings may be built on its edge at any point, but this is not true of a street. Structures, such as rest stations and seats, and customary conveniences such as newspaper stands, may be erected within the legal confines of the street, but only in aid of convenient, agreeable communication.

PUBLIC SQUARES

Somewhere, physically, between the park and the street, is the public square. Sometimes it is used for traffic; then it is, physically, nothing but a more spacious street. Sometimes it is shut off from wheeled traffic by a curb, with space for seats, grass, and perhaps a fountain; then, physically, it is a small park. In both cases, however, it may be land taken for and devoted to what are, legally, street purposes. As we have seen, however, there is no reason why land to be used in this way should not be taken for park purposes and, although physically the same, be legally a park; as may also strips of land at the side of, or dividing, roadways.

PARKWAYS AND BOULEVARDS

With precise but sometimes different meanings in landscape architecture and in law is the word "parkway." To the landscape architect it usually signifies a road with green strips and perhaps trees. To the lawyer it is a way through a park. Abutters, as such, have no rights in it, and if the park is wide enough the parkway may be shifted in location by the park authorities, at will. A park may be of any width, and the parkway, therefore, may occupy the whole of it, with or without green strips or trees. To the landscape architect, if there is no green connected with it, it is not a parkway at all; but if the land is devoted legally to park purposes, it is to the lawyer, none the less, park land used as a way.

The word boulevard has no precise meaning in law. In landscape architecture and popular use it means, as you well know, an important street of more than average width, which may or may not be landscaped.

PLAYGROUNDS

Another word without definite legal meaning is "playground." Play for small children—or adults—is a legitimate park use. The playground, small and devoted entirely to recreation for young children, may, therefore, be a park. Play for children is also a proper—indeed essential—accessory to a school, and part of its lot increased in size for the purpose may be so employed. In that case, technically, the playground would be building site, and could



Courtesy of Board of Park Commissioners

VAN CLEVE PARK, MINNEAPOLIS
A playground in a seven-acre neighborhood park

be encroached upon or entirely occupied by school buildings, in the absence of special legislation forbidding it, and cease physically to be open space at all. There is an advantage, therefore, in acquiring playgrounds as parks.

LAND AROUND PUBLIC BUILDINGS

The land around public buildings, physically open and with grass, trees, and seats in it, is often owned by the public. This land may legally be either a park or a part of the site of the public building in question.

SETBACKS

Land along public streets—and perhaps elsewhere—remaining in private ownership except for an easement in favor of the public that it shall not be built upon, is an open space partly in public ownership, benefiting the public in some of the ways that parks serve it; indeed strips physically indistinguishable from these setbacks are sometimes acquired as parks. In such park strips the abutters have no rights, but in fact find them as useful as if they had rights, and usually without expenses of maintenance.

THE FREEWAY

Interesting to consider in connection with parks or streets, and the legal differences between them, is the proposal to establish a new kind of thoroughfare for which the name "freeway" has been suggested. The freeway is devised as a facility for rapid, long-distance traffic. Such communication can be obtained only if it can be freed from the interference of local traffic entering, crossing, and leaving it. In a street, local access is the right of every abutting landowner. A method of shutting off the right, and the interruptions to rapid transit through traffic which it entails, is the acquisition of park strips on each side of the desired rapid-transit thoroughfare, which need be broken to give entrance and exit from the thoroughfare only at such points and at such intervals as seem desirable. But park strips are expensive and not always essential. Why not, when desirable, condemn land for a thoroughfare without them which nevertheless does not give the abutters rights of access? If legally possible, it will secure the desired result. The only legal objection to it would seem to be that it creates a new kind of highway; but there would seem to be no validity in such an objection, more instinctive than sound, for the new sort of highway seems reasonable, useful, and possible. It may, perhaps, be classified as somewhere between a street and a parkway, having some, but not all, of the characteristics of both.

ACQUISITION, WITHOUT CITY PLANNING POWERS

Local governments within a state derive all their powers either from the people of the state, by amendments of the state constitution, or from the state government, by laws passed by the state legislature. Inherently they have no powers, but obtain them as a grant in one of these two ways.

Until comparatively recently, and as a rule to-day, most of the powers of local governments, such as that of acquiring land, are obtained by special or more or less general statutes for that purpose; often most of these statutes are grouped in a statute called a charter, of the city or other local government. Of late there has grown up a movement to give cities, and to a much lesser extent other local governments, a broad general power to manage their local business and affairs. These powers are called "home rule." It is granted sometimes by statute, but, so given, can be limited or varied at any time by subsequent statutes. Generally, therefore, home rule, if granted at all, is given by Constitutional amendment. Whether having home rule or not, a local government may have the power of acquiring land without modern city planning and platting powers, or with planning or platting powers varying that power of acquisition. In all cases the nature of the power to acquire the land determines the title to the land which the municipality obtains; *i. e.*, it determines the uses to which it may be put.

A municipality without home rule, and without modern city planning and platting powers, acquires land by virtue of a statute, or statutes, which may or may not be in its charter. Older statutes usually gave the municipality the right to acquire it for a given purpose,—as, for instance, a park. It follows that if the city attempts to use such land for any other purpose, the law, if properly invoked, would prevent this use; and if in fact so used, the land would revert to the former owner; for the city did not acquire the whole title to the land, but only so much as was necessary for the city to use it for a park.

A city may also acquire land by gift. If the land is given for a named purpose, as for instance a park, and it is devoted to another purpose, as for instance the site for a public building, the land in this case also reverts to its former owner. If, however, the land is condemned under a statute giving the city the power to take the entire fee, and it is put to another use, it does not revert. There are usually statutes preventing a non-home-rule city from converting its park land to non-park uses without obtaining a special statute from the state legislature authorizing it so to do or making it difficult for it to do so.

A home-rule city may or may not have power to acquire the entire fee of land for a park. It usually has greater power to devote park land acquired in fee to other uses; but even in that case some special procedure like a referendum is usually required.

A state statute is sometimes passed allowing or directing a city to devote park land to some non-park use, as for instance the site of an opera house. Evidently, if the city owns only the right to use the land as a park, the statute is unconstitutional; but if the city owns the fee, it would be effective in the case of a non-home-rule city; and in the case of a home-rule city, its effect

would depend upon the nature and extent of the home-rule powers. If effective, the statute is really the discontinuance of the park or part of the park in question.

It is often said by the Courts that a city holds park land in trust for the people, and for that reason cannot part with it or devote it to another use. It is difficult to find in the case of parks anything which can be accurately described as a trust. It would seem to be more correct to say that more safeguards are thrown around a park use than around other uses; that statutes have been passed accordingly; and that sympathetic Courts have interpreted these statutes liberally. The difference between the title of the ordinary city in park land which it cannot sell or devote to other purposes, as a rule, without the permission of the legislature in the form of a statute, and in a building site which it can normally sell or use for any purpose, is certainly marked.

Streets, also, are held in a more restricted title than parks; but they can usually be closed and discontinued by the city without special legislative authority, the land being converted to other uses or sold. To do so, however, compensation must be made to abutters for the rights in this land of light, air, view, and access.

ACQUISITION AIDED BY CITY PLANNING POWERS

So far we have discussed the acquisition of land by the municipality without the employment of city planning powers. Modern statutes have, however, made these powers extremely useful in this connection.

The planning of the public features of a city is the placing of the land which in the future will be needed for these features on the city map. This is done far in advance of the acquisition of the land for the purpose. A city never has resources for such expenditures in excess of its immediate need of the facilities; and if it had, it would be an economic waste to deprive the owners of land of the profit to be obtained from its use, to forego the city's share of this profit in taxes, and to pay interest on the cost of the land, construction, and maintenance of the improvement for many years when not needed. A plan in advance, however, is required in order that the best locations for the public features may be secured, and work from time to time coördinated.

The plan, in order to preserve the land for future acquisition, must prevent improvements on it by its private owners between the time it is mapped and the time it is taken and paid for by the city; otherwise, the expense of acquiring the land with the improvements will be prohibitive.

Most of the earlier planning laws attempting to do this have been declared unconstitutional by the Courts, on the ground that there was a taking of a right in the land without compensation,—namely, the right to use it for



Courtesy of Board of Park Commissioners

THE GATEWAY, MINNEAPOLIS

An architectural feature in a city park. Visitors arriving by train receive here their first impression of the downtown section

building purposes between the time it was planned and the time it is taken and paid for. In certain cases, as, for instance, a large park, this objection is insuperable. As a rule, however, it is an advantage to a man to have a street plan made for his land, and he has no need to put his building directly in the bed of a mapped street. Usually, therefore, a street plan, defended by the police power, imposes no loss upon him; and if he is given, as in zoning, the right of appeal to a local board in case he feels himself to be unjustly treated, the exceptional injustice is remedied. As a first step in the acquisition of land for streets, therefore, modern city planning laws, like those of New York and New Jersey, for instance, are most important.

Platting control is a little different. It requires a man who means to develop housing land to sell at a profit to leave space for streets to serve these houses. This would seem to be a proper requirement for the public health, safety, and convenience. Under some statutes the subdivider is required to give the land for the streets to the public. This seems legally dangerous. The Courts are accustomed to the taking of land by a local government for streets only on payment by that government for the property taken. This risk is also unnecessary; for if the developer must leave street land for the use of those who buy house lots on his tract, he might as well—indeed, might better—give it to the local government; and if he does not, it is so burdened by easements of passage to each of the purchasers from him that the community, if it decides later to condemn it, would be obliged to pay the owner only a nominal sum, like one dollar, for it, since that would be all that it would be worth to him; and the lot owners suffer no loss.

There is a growing feeling that subdivision control by which, under the police power without expense, streets in new subdivisions are obtained, should also require playgrounds, or to be more accurate, small parks to be used as playgrounds. The argument for such a requirement is that, like streets, they are for the public welfare, and, in reasonable proportions to the entire tract subdivided, not an undue burden upon the developer. Laws of a few years ago, accordingly, required subdividers to give up 10 per cent of their tract for the purpose. But in some cases this would not produce a proper playground system, and might also be a hardship to a subdivider. Here, as with streets, the exceptional case of hardship and injustice is possible, and if not guarded against, would render the entire provision unconstitutional. The New York and New Jersey laws, therefore, instead of requiring a fixed percentage in every case, provide that planning boards regulating platting may in appropriate cases require the subdivider to leave a reasonable proportion of his subdivided land open for parks; giving an appeal to the courts if the discretion of the planning board is unreasonably used.

HOW TO START LOCAL PLANNING

By EDWARD T. HARTMAN
State Consultant on Planning, Massachusetts

EVERY town, at least occasionally, does things that have a relation to the town plan. The object of planning is to see that when a thing is done, it is done in the right place and in the right way. Without a plan, any step taken may solve the immediate problem but prove a serious misfit in the solution of this same problem for the whole town.

The question of the best method of starting planning is puzzling at the present time, not because there are not satisfactory methods, and surely not because there is no need for such planning, but because of the type of work that has been done in many cases, and its reaction on the public mind. Many cities have spent large sums of money for half-baked results. As an able man said over fifteen years ago, a lot of the beautifully pictured plans that have been prepared are of things which "could not be executed and which should not be executed." There is less of this sort of work when the local board coöperates with the consultant.

A part of our difficulty lies in the fact that planning has been exploited by those who gather a few general ideas, lay out a plan which, as one man puts it, is not conscientiously scientific, collect their money, and disappear. The plan was not carefully prepared; it was so inclusive and so expensive to execute as to frighten people; the local officials were not brought to an understanding of why the things should be done, and of the sequence in which the various steps should be undertaken. The people were, of course, in no way brought into contact with the matter. The result has been that when conditions force the taking up of some particular item, its treatment in the plan, if it was covered, is found not to produce the desired results, or not to be feasible, and the whole matter is left in the air.

The result is that the local people have to take up each problem anew, with the handicap of a bad plan in the way. They will unavoidably have this bad plan in their minds and they will not see the problem in an independent and open-minded way. In such cases the basic need is a sense of direction, such as will come from sound preliminary study of the possibilities and needs of the town. If the local people can approach a specific problem in this way, with a sense of the manifest destiny of the town and the purpose of the specific problem, and if it is their intention to solve the problem, they will generally work out some solution that will give fair results.

The people of the community have to get back of a plan sometime if it is ever going to be put into effect. This must be kept in mind. It is not the plan in a book, but the people, who make a plan work. It seems, therefore, that the people should leave nothing to super-planners working without

local contacts. It is inadvisable to employ some outsider to come in and prepare a comprehensive plan unless the community has arrived at the point where it intends to go thoroughly into the matter, investigate every proposal as developed, and arrange a comprehensive program of procedure and a sequence of development which is to carry the whole thing into effect. This necessitates an adviser who is coöperative and who will, as a matter of fact, make the work of getting the plan into effect a part of his job.

The first step of a conscientious planner is to understand the town and to outline the problems to be solved. This is no place for guesswork, and still this isn't the place for final solutions. It is an outline of problems. It should define the main problems as they disclose themselves after a careful survey. Here is the place for a skillful adviser to show needs and to start community-thinking along sound lines. If the local people keep close to the development of this preliminary plan they can get results out of it. Each step is thereafter to be worked out in detail, for itself, but in relation to the whole.

Pressure of need frequently forces action that results in permanent injury. With a sound preliminary study any step taken under pressure is more apt to be taken properly than if it is done without consideration of related needs and of the development of the town as a whole.

When it comes to undertaking specific steps, some local technical man should be allied with the work. Such a man may be the town engineer, the superintendent of streets, or a member of some local board, or he may be retained for that particular work. He should check up for the people and serve as a direct contact between a general adviser and the people.

To get a final check-up and to have the advice and experience of a man who is willing to do work that is both conscientious and scientific, a general adviser on planning should be retained to help work out difficult problems in the first instance and to advise on various proposals as they are in process of development. This is being done in a few places in the country and, in fact, it is the process used in places which have gone to the expense of having a plan prepared, before definite results are secured. Each problem is worked out in detail by the local people. This check-up by a trained man aids toward a proper solution of complicated problems and the avoidance of errors of various kinds. The process is one of evolution, and that is the appropriate process of city planning. There is no hard and fixed plan, for the solution of a particular problem, which seems appropriate to-day, may in a year or two need to be modified in various respects. Study by the people and guidance by the adviser will secure sound results.

Of course, it is very important in the early stages to develop the main elements of a master plan. This is in large measure the purpose of the preliminary study. It consists primarily of deciding, as nearly as may be, where the main thoroughfares shall be developed. Another element is the secondary street system, which ties up the various parts of the town so that it can

function within its own boundaries. The development of the additional area of the town is a matter of land utilization, which should be under careful supervision and in which we are just beginning to get some ideas which promise to give superior results. In this master plan come all needed utilities and their general location, and zoning: that is, the best economic and social use to which to put the area of the town.

The first essentials of planning success are local interest and local leadership of a type calculated to produce results and with a disposition to see that no mistakes are made. With or without a plan of the sort some places have had made, nothing is ever accomplished and no money is ever appropriated until the local people believe the thing is sound and that it needs to be done. What the community wants is to see that everything that is done is done in the right way, and no place will take a definite step until it is convinced that the thing pretty badly needs to be done.

There are places where the planning board or some other group has felt that it wanted to make a show and has prepared a nice picture-book of things which, as above pointed out, could not be done and should not be done. This is what one planner calls "planning for the archives." The plan is filed away and nothing is ever done about it because it had in it nothing that was vital and dynamic enough to appeal to the authorities and to the people. One city had four such plans prepared by men of varying abilities. The city itself finally went to work, and employed a capable man to tie up the various suggestions and act as an intermediary between the officials and the people.

It is just as practical to hire an architect to plan a fifty-thousand-dollar home you do not intend to build, as to hire a planner to prepare a grandiose plan which, because of its impracticable nature, is never carried out. When you employ an architect you check up his work at all points. When the plan is agreed upon, a builder is engaged and the house is built. Treat the work of the planner as you do the work of the architect and results will follow. The essence of the thing is to have community leadership with technical assistance, not technical leadership without community backing.

This is pretty nearly the whole story. On the board should be, if possible, a man with technical training, architectural or engineering,—preferably the latter, if he is the right sort,—and then a determination to discover problems and to solve them. Along with this, if you have someone who can be called in for consultation whenever you want him, and if you use him, you can make progress. There will be no progress until there is local leadership and a lot of local work.

No employed man can create a planned town. No people can free itself from its essential work by employing an outsider. No outsider and no people can prescribe without diagnosis. When the people and the consultant cooperate toward understanding the problem and solving it, results will follow.

EDITORIAL

PREVENTIVE PLANNING PAYS DIVIDENDS

An ancient test for sanity was conducted by having the person to be examined bale out a trough into which water was constantly running from a spigot. Unless the person first turned off the spigot he was judged insane. What, then, can be said for a municipality which spends millions of dollars in widening streets that originally were built too narrow and at the same time permits new streets to be improperly located and designed? How wise is the city which annually increases its appropriations to care for juvenile delinquents and at the same time fails to provide parks, playgrounds, and opportunities for decent housing?

Mr. L. Deming Tilton in "Preventive Planning"¹ has marshalled an array of evidence to prove to the most skeptical that in city planning matters, as in many others, the proverbial "ounce of prevention is worth a pound of cure." He points out that preventive planning does not call forth glaring newspaper headlines, yet it is in this quiet, everyday work that planning commissions who have the "courage of the commonplace" serve their communities best.

The expenditure of millions of dollars for replanning and rebuilding is often necessary and justified, but too many times this is because the original plans either were not wisely conceived or were not followed. If we plan well to-day and then succeed in carrying out these plans it is unlikely that those who follow us will have to tear down and rebuild our handiwork. Municipal commissions laboring under the misapprehension that the completion of a comprehensive plan terminates their work may discover from Mr. Tilton's paper that in the day-by-day translation of the plan into actuality many costly and sometimes irreparable mistakes may be prevented. Here lie their greatest task and opportunity.

H. K. M.

¹See page 234 of this issue.

CURRENT PROGRESS

Conducted by JOHN NOLEN and HOWARD K. MENHINICK
LAWRENCE VEILLER HAROLD S. BUTTENHEIM
ARTHUR A. SHURCLIFF CHARLES W. ELIOT 2d
GORDON J. CULHAM

INTERNATIONAL HOUSING AND TOWN PLANNING CONGRESS

The Thirteenth Session of the International Housing and Town Planning Congress was held in Berlin the first week in June. In accordance with the custom of the International Federation, only two subjects were discussed. This year they were "The Abolition of Slums," and "The Traffic Problem in Relation to Town and Regional Planning." In addition, however, a special report was presented by Dr. R. Heiligenthal, Oberbaurat, Professor at the Technical High School, Karlsruhe, on "The Lessons of Recent Congresses."

The general report on "The Abolition of Slums" was made by Stadtbaurat Paul Wolf, of Dresden. His main topics were the creation of slums, the methods of dealing with them, including the legal basis and compensation, the rehousing of the evicted, use of the cleared site, and financing. His conclusions were as follows:

In reviewing the problem as a whole it seems clear that to make an effective fight against the dangers arising everywhere from the existence and increase of slums it is necessary to have statutory provisions for the following:

- (a) Expropriation by zones (with corresponding regulations regarding the replotting and replanning of land).
- (b) Valuation for the purposes of determining compensation.
- (c) Rehousing of the evicted.
- (d) Providing for public funds for slum clearance.

Moreover, it is necessary to study the connection between land ownership and the creation of slum districts, for the correct adjustment of the rights of landowners will be for a long time to come of great importance in carrying out slum clearance.

Mr. George L. Pepler, Past President, Town Planning Institute, London, made the general report on "The Traffic Problem in Relation to Town and Regional Planning." He dealt mainly with decentralization, and the problems connected with railways, roads, omnibuses, and air transportation. The conclusions which he presented were:

Informed opinion regarding these problems appears to be almost unanimous, and the difficulties are no longer to find the right remedies but rather to induce the authorities concerned to adopt them. It now appears to be universally recognized by all who have studied the subject that confusion, waste, discomfort, and danger to life will steadily increase

unless the development and redevelopment of land and the organization of all means of transport are directed in accordance with comprehensive plans that are in conformity with national, regional, and local needs and that arrange for zoning and means of communication to be co-related.

There also appears to be a large body of opinion in favour of the consolidation of transport undertakings under one management, the separation of suburban and main line traffic, and the decentralization of goods stations.

Expert opinion also appears to be largely agreed that increase in the size of buildings in the centre coupled with continuous aggregations on the periphery is unhealthy, wasteful, and inefficient, and that increase in size should not be allowed unless adequate land is surrendered to provide for additional access of light and air and for accommodating the extra traffic caused by the extra bulk of building.

Ribbon building is almost universally condemned and satellite town development recommended; there is general agreement on the ideal form of town that should be aimed at.

Mr. Pepler added to this general report a valuable digest giving a suggestion of four important questions upon which discussion might be centered with advantage.

A notable part of the Congress was the Exhibition, an ambitious presentation in graphic form of the progress of city planning and housing, of their trends, and of proposed future developments.

Sessions of the Congress were held only during the forenoon. Each afternoon was given to study visits in town planning, housing, and related developments in the neighborhood of Berlin. At the annual meeting of the Federation, Mr. John Nolen of Cambridge, Massachusetts, was elected President; Mr. George L. Pepler, London, Honorary Secretary; Mr. Kai Hendricksen, of Denmark, Chairman of the Executive Committee; and Mr. H. Chapman, London, Organizing Secretary. The invitation of His Honor, Mayor Curley, to hold the next Congress of the Federation in the City of Boston, Massachusetts, in the autumn of 1932, was accepted by the Federation.

J. N.

COMMUNITY HOUSING IN PITTSBURGH

The Buhl Foundation, financed by a \$13,000,000 fund provided by the will of the late Henry Buhl, Jr., Pittsburgh department-store owner, has begun the construction on a 45-acre hillside tract in Pittsburgh of a garden-home community that will ultimately cost \$2,000,000 and provide homes for 300 families of moderate income. The first \$1,000,000 unit will be built at once.

The purpose of the Foundation is to create a means of investing its funds which will permit its capital to perform civic and social services and at the same time provide non-speculative annual income for other philanthropic enterprises.

The property is seven minutes by automobile from the heart of the city. Three schools are located nearby. Less than thirty per cent of the tract will be occupied by houses. The remainder of the area will be devoted to central parks running through the property, to lawns and gardens around each dwelling, and to playgrounds for young children. These facilities will be maintained permanently by the Foundation.

The houses will contain five, six, or seven rooms with a ground and second floor. They will be built in units of from two to seven houses with sound-proof walls between. Each home will have a finished basement with laundry and independent heating plant, an electric refrigerator, and a living-room fireplace. The larger houses will have private garages while those of the smaller homes will be built in groups at convenient places. Homes will be rented, not sold, for the Foundation desires to maintain control over the property so as to guarantee the continued high character of the community. Messrs. Clarence S. Stein and Henry Wright are consultants on the community-planning aspects of the problem.

CHARLES F. LEWIS,
Director, The Buhl Foundation.

UNIVERSITY OF VIRGINIA REGIONAL ROUNDTABLE

At the Roundtable on Regionalism, held at the Institute of Public Affairs of the University of Virginia at Charlottesville, during the week of July 6, city planners had an interesting opportunity to put aside for a moment problems of traffic counts and capital budgets and to join with poets, soil chemists, legislators, sociologists, administrators, and lawyers in a reflective consideration of the human values to be promoted by planning,—and planning of the scope and type best calculated to subserve the good life.

What mode of life is land planning to serve? To give point to this question, Professor Roderick D. McKenzie of the University of Michigan, as a sociologist specializing in urban population trends, told with a wealth of illuminating statistics, what mode of life we seem to be getting in this country.

We are getting at an accelerated rate a concentration of population into a few great metropolitan areas, although the form of the metropolis itself is changing as the population flows from the center to the rim. Each of these centers tends to duplicate the functions of the other: for instance, of the 348 types of industry listed in the United States Census of Manufactures, 281 appear in the New York area, 279 around Chicago, 265 in Philadelphia, etc. This duplication seems, if anything, to enhance the interdependence of these areas; and the shifting tensions of the labor markets achieve equilibrium at the cost of a populace of migrants, of fragments of families. The shifts promote obsolescence and blighted areas. It is a civilization of mobility and

insecurity. As an illustration of what city planning is trying to do to help the problems produced by these processes, Mr. Flavel Shurtleff described the Regional Plan of New York and Its Environs, and similar projects.

To several groups at the Roundtable, this picture, even as touched up by Mr. Shurtleff, did not seem satisfactory. The Southerners, like Dr. H. C. Nixon of Tulane University, wanted particularly to know whether planning could not save for the South those elements of its cultural tradition that seemed precious, against the flood of the new industrialism now threatening to inundate it with mere undifferentiated metropolitanism. Mr. John Gould Fletcher, the poet and co-author of "I'll Take My Stand," contrasted what he called "false cosmopolitanism" with the regional values symbolized by Patrick Geddes in the trilogy of place, work, folk. Mr. Stringfellow Barr, editor of *The Virginia Quarterly Review*, in a brilliant paper pleading the same point, argued for the virtues of the grasshopper, too severely underrated by Aesop: it sings better than the industrious ant, jumps higher, sees more of the world,—and always seems to be with us next year.

Lewis Mumford came closest to defining regionalism, when he said that planning in such terms respects the balanced environment and the settled mode of life. This means more than the planning of a political unit, more than the planning of the area dominated by a metropolis; it means planning cities, villages, and permanent rural areas, considered as part of the regional complex. It means the planning of cities, not with reference to the superficial area of land to be filled, but the institutions and functions to be served. And it means, he said, considering again, in the light of new forces emerging in our civilization, what is the best size for a city,—a question reflected upon since Plato and Aristotle, but lost sight of in recent generations of growth focused more upon increase of land values than optimum living values.

Among those who spoke for regional planning (using the phrase in this broader sense, and not merely as the planning of metropolitan environs) were Governor Franklin D. Roosevelt of New York, who made clear that it is not merely a "back to the farm" movement, but that, on the contrary, scientific regional surveys show that in some sections nearly a quarter of the land now farmed is unsuited for agriculture, and should be devoted to forests or permanent open space; Mr. J. Gordon Bohannon, President of the Virginia State Port Authority, who stated frankly that his conception of the development of the Port of Hampton Roads was not that it should become a superport, but should be developed so as best to serve the area naturally tributary to it; and legislators, administrators, and educators from all parts of the nation.

What are the implications for city planning of regionalism as a philosophy? Is the hope of a balanced environment mere wishful thinking? Mr. Ernest P. Goodrich (*in absentia*) presented a paper on Statistical and Engineering Methods in Planning, which together with Professor McKenzie's barrage of figures, might justifiably make one feel that mass population movements are

natural phenomena—perhaps physical, perhaps biological, perhaps sociological—which a scientific student can hope to chart, and for which, with sufficient knowledge, formulae can be devised; but that, in the large, human beings act like so many ants, fruit flies, or atoms, of which it can be predicted that of an aggregation of x units, y will tend to agglomerate at the center. The attempt so to chart human movements is bold, and stimulates the scientific imagination.

"And yet," said Mr. Russell V. Black, "all human migrations have ended and the migration to the city will end like the others; the very forces which attract people to a city or region tend to defeat themselves when they have operated too long." Mr. Henry Wright quoted from the studies of the New York State Commission of Housing and Regional Planning to show that whereas the maximum acreage of farm land under cultivation was reached in that state in 1880, it now seems clear that the introduction of steam power to replace local water power, and the building of the trunk-line railroads along the river valleys—which began about 1850—were the forces destined thirty years later to bend what looked in 1850 like a continuously upward curve. The challenge to city planners then becomes to try to appraise whether regionalism as a philosophy is motivating any forces, or is supported by any technological factors, which are destined similarly to bend the curve of metropolitan growth.

On the other hand, if regionalism implies sound living values, the discussion indicated that city planners can be among its most powerful promoters. They have developed the technique of the survey, which lies at the basis of all planning. They have, in the course of a generation, evolved technical tools which have already won public acceptance and approval of the courts.

For example, an adaptation of zoning seems the most likely way of dealing with the regional problem of preventing the back-wash of the metropolis from oozing along all the highways and inundating the countryside with rural slums,—a problem discussed by Mr. Benton MacKaye and Mr. Albert S. Bard.

The Roundtable made clear that the regional point of view, as opposed to the metropolitan or national, has adherents in all fields and walks of life. It suggested that the city planner should call upon such men and women as his supporters, and with their help focus public attention not on the now dominant problem of providing more means of circulation, but rather on the fundamental question of so arranging our lives that we don't have to circulate so much. The first problem seems almost insoluble; everybody from Mr. Daniel Turner down confesses that, if anything, we are falling behind. If we can solve the second, we have the possibility of a really ordered life.

CHARLES S. ASCHER,

Attorney, City Housing Corporation.

MASSACHUSETTS FEDERATION OF PLANNING BOARDS

The Eighteenth Annual Conference of the Massachusetts Federation of Planning Boards will be held in Lowell, Mass., at the Auditorium, on October 7 and 8.

Following registration and the opening luncheon, the afternoon session will consist of an open forum with discussions of planning and zoning problems, Mr. Arthur C. Comey presiding. Features of the evening meeting are the Presidential Address of Mr. W. Franklin Burnham and an address by Mr. Thomas Adams on "Regional Planning at Home and Abroad."

On October 8, at the breakfast session, Mr. Edward T. Hartman will discuss "Progress of Planning in the State." Local boards will give brief reports. Automobile trips and a luncheon at the Vesper Country Club with speeches by state legislators complete the program.

ARTHUR C. COMEY,
Member, Executive Board,
Massachusetts Federation of Planning Boards.

NEW JERSEY REGIONAL PLANNING COMMISSION

The State Legislature created the New Jersey Regional Planning Commission in 1929 to study and report upon a plan or plans to carry out and administer intermunicipal, intercounty, and interstate projects. The Commission has sponsored bills in the last two sessions of the legislature providing for the division of the state into four regional districts. One of these districts, the metropolitan area of North Jersey, contains 225 municipalities and about 3,000,000 persons. Legislative commissions for the past thirty years have urged the creation of a single governmental authority to provide major public works in this territory.

As proposed, regional commissioners would be elected for each district, one member from each county, with their votes based upon the population of the counties represented. They would be given authority to issue district bonds with which to finance and construct water-supply, sewerage, and drainage systems and to engage in meadow reclamation. The opposition of county and municipal officials has thus far prevented the passage of the recommended bill, but the Planning Commission has been continued and will present another bill of similar character at the next session of the legislature.

HERMAN B. WALKER,
Secretary, New Jersey Regional Planning Commission.

ZONING ROUNDTABLE

Conducted by EDWARD M. BASSETT

IS BEEKEEPING AN INDUSTRY?

Jefferson C. Grinnalds of Baltimore submits a brand new problem. Mr. Salley, disabled war veteran, seeks to eke out his income by keeping three hives of bees in a back room on the third floor of his home in Baltimore. A neighbor, claiming that she was stung by one of the bees, complained to the authorities. The Board of Health claimed that it was not up to it to oust the hives as beekeeping was not a matter of public health. When the complaint came to the ingenious building inspector (not Mr. Grinnalds) he declared that Mr. Salley was carrying on an industry in a residence district and must quit. Mr. Salley replied that he did not make the honey. It was the bees which were doing what they had a perfect right to do. Neither did he sell the honey. He said that he and his family ate it, to the extent of 183 pounds last year. They liked honey. Moreover, Mr. Salley asserted that the neighbor could not prove that it was one of his bees that did the stinging, and that the apiarists' society to which he belongs claims that no member can be held responsible until the stung person can prove who owned the bee. He says that his bees are harmless and he produces a photograph to show that his four-year-old daughter plays with the bees and they crawl all over her. Nevertheless, the building inspector decided that the bees must go because they constitute an industry in a residence district. Mr. Salley has appealed to the Board of Appeals.

So now the bee case is on its way to court. We prophesy (that is, Mr. Grinnalds and the writer) that the bees will leave a long trail of trouble through the Board of Appeals and the courts. The building inspector would have been wiser to let the bees alone. He admits that he has not identified the bee. Mr. Salley says that more than a thousand people in Baltimore keep bees, and that if he conducts an industry, then they all conduct industries and must be suppressed.

The case has a serious side along with much instruction. The Roundtable has referred to similar problems,—that of the chicken farm, the duck farm, and the movable rabbit hutches. An interesting court opinion has recently been handed down in Connecticut (*Chudnov v. Board of Appeals of Town of Bloomfield*, 154 Atl. 161) holding that a chicken farm is not a farm such as can be maintained in a residence district. Of course, the building inspector should have let the bees alone. So far as zoning goes, the keeping of bees is an incidental home use. In many cities bees are kept numerously

in suburban localities. Beekeepers know that they cannot keep a large number of hives because the radius of the bee is only about three miles, and the various groups of hives must be well separated. Hives will not prosper if they are too numerous in one spot. Probably administrators of zoning will not be troubled by honey-making as an industry.

There is no doubt that the council of Baltimore has power to regulate the keeping of honey-bees. It could pass an ordinance excluding hives from thickly-settled parts of the city. Probably the council would be unwilling to extend such exclusion to the outlying sections. The enforcement of this ordinance might be left to the police or the board of health or some other suitable department. It should not be left to the zoning authorities.

Some people think that zoning is a new discovery that will cure everything. It probably will not cure loud-speakers, scolding neighbors, or the vicarious honey-bee.

E. M. B.

BOUNDARY LINES OF DISTRICTS

We all know that the boundary line between business and residence districts should be the center of the block, or a fixed distance from the business street,—say one hundred feet. Is it ever justifiable to make the street the dividing line between business and residence? Undoubtedly there are cases where it is. But it is a singular fact that there seems to be no reported decision of a high court upholding the reasonableness of making one side of the street business and the other side residence. Every decision is the other way. Sometime a court may hand down a decision that a residence district may properly be opposite stores on the same street, but it will probably be in the case of a very wide street with extensive parked and planted spaces in the center. It may be that courts see more clearly than zoning engineers that it is unreasonable to make one side of a street business and the other side residence. Probably zoning advisers are influenced by the history of a locality and the courts disregard the history and strike directly at the reasonableness. In many cities restricted residential developments were established before the days of zoning. Under private restrictions controlling the development, detached residences were placed on the boundary street but the opposite side of the street was unrestricted. When a zoning ordinance was passed, a few stores had crept into the unrestricted side and the zoning authorities were tempted to make one side of the street business and the other side residence in order to prevent the intrusion of the rears of stores into the established residence district. History and the local feeling had much to do with this. But some way or other these elements do not seem to appeal to the courts. The writer has been fairly consistent the last fifteen years in saying to city officials that, if they make one side of a street business, it is the best and

safest plan to make the other side business also. But it has been plain to us that now and then local knowledge and history must be recognized. We originally hoped that conditions would be imposed by the board of appeals to ameliorate the harmful invasion of grocery stores, fish stores, and delicatessen shops by permitting only banks, offices, dry-goods stores, and similar uses. It must be admitted that the courts do not follow us very well. For instance, they would probably prefer that the council would make two kinds of business districts, one for food-product stores and the other for non-food-product stores. Then in some of these difficult streets the courts might justify the former on one side of the street and the latter on the side that most needed protection. This is all for the future to discover. We must tentatively consider that the courts like to see both sides of a street zoned alike, and that they will not be patient with the zoning of an entire side of a street by board-of-appeals variances coupled with conditions. We cannot find much fault with the attitude of the courts in this regard. If private restrictions have not expired, the owners of residences cannot build stores even if their side of the street is zoned as business. When the houses wear out and private restrictions have expired, the owners usually want to use their land for business and not for putting up new dwellings. There are hundreds of instances where residences continue opposite stores regardless of zoning. When the property owners on the residence side of the street become fairly unanimous that they want the zoning changed to business, the council usually makes the change. Perhaps the difference is not great whether the council makes the change later or makes both sides of the street uniform at the beginning. The main consideration in the minds of the officials is that the premature zoning of the residential side as business allows the sporadic store to intrude its rear into the heart of the residential development, thus injuring many and blighting a considerable section for open-development residential uses.

E. M. B.

BOARDS OF APPEALS

Boards of appeals should more often advise the council to make desirable changes of the zoning maps. Some ordinances provide that the board of appeals shall make such reports from time to time. But whether this is the case or not it is equally within the power of the board of appeals to make these reports of its own motion to the council. Here is an illustration. In Greater New York on Audubon Avenue,—a residence district,—the board of appeals, presumably justified by the environment, granted a variance permit for a business use subject to conditions. Since that time it has granted six more similar variances. It has created a business district by making variances. This is not justifiable. If a considerable amount of frontage—let us say all the lots on both sides of a street between two intersecting streets—is substantially situated alike in respect to the propriety of business instead of resi-

dence, the board of appeals ought to refuse the second or third variance permit and report to the council that the street should be changed from residence to business on the zoning map. In this way the land that is situated alike will be zoned alike. On Audubon Avenue, after seven business variances had been made, the owner of a dwelling in the midst of the stores asked for a variance permit to allow him to establish a mortuary in his dwelling. It was necessary for him to go to the board of appeals because, it must be remembered, the district was residence on the zoning map. The store owners protested against the mortuary because of its depressing accompaniments, and the board of appeals refused the variance. Undoubtedly there was some good reason for the storekeepers' protest, but after six or seven stores had been favored with variance permits, it is difficult to see how the board of appeals could pick and choose between various legitimate callings. Nevertheless, if the home owner desiring the mortuary variance asked for review by the court, the court under all the circumstances would be likely to uphold the board of appeals. The board of appeals should even before the mortuary case arose have reported to the local legislative body favoring a change of the street from residence to business on the zoning map.

We are all beginning to see more clearly that the powers of boards of appeals to make variances are and should be lawfully confined to exceptional situations. Where the situation affects a considerable number of lots the council should act by amending the map. Boards of appeals learn of these situations before they come to the attention of the council. The board or a committee inspects the property. It knows the history of the locality and the trend of its development. It should not remain silent. Sometimes such boards will say that they ought not to take any action that surrenders any of their powers. This is a mistaken view. Their duty is to help cities to shape up the best possible zoning maps.

In the argument of a recent zoning case before the Court of Appeals, State of New York, in which the municipality claimed that the applicant for a variance should have exhausted the remedy given him by law by first going to the board of appeals for a variance, Chief Justice Cardozo several times inquired whether there was anything unique or peculiar about the lot in question which made it differ from other lots fronting on the same street. Mr. Cardozo wrote the opinion in the *Fordham Church* case¹ which has become a leading case regarding powers of boards of appeals. Perhaps no judge in the country has a clearer insight into the logical and legal adjustments necessary to perfect the administration of zoning. Undoubtedly Justice Sutherland of the United States Supreme Court, who wrote the opinion in the *Euclid Village* case, had this distinction in mind when he said that the applicant was justified in omitting the board of appeals. He might have said (but he did not) that the village should show that there was something unique about the applicant's

¹*People ex rel. Fordham Manor Reformed Church v. Walsh*, 244 N. Y. 280.

lot which differentiated it from all other lots in the incidence of the zoning regulations. It has been difficult to understand his exact meaning. He wrote, "the attack is directed not against any specific provision or provisions, but against the ordinance as an entirety."

Courts in this country are not trying to shatter zoning, but to strengthen it. Successive wise court pronouncements are showing us that boards of appeals must not be allowed to take the place of local legislative bodies. They must not build up business districts by making variances. The making of business centers in zoning is a legislative function. We know now that the applicant need not in every case go to the board of appeals, but that in certain cases involving unconstitutionality, he can compel the issue of a proper permit. We are beginning to learn that a zoning variance must apply to a single exceptional situation, and that there should not be a succession of variances that gradually usurp the function of the council. All of this instruction is wholesome. Councils must make the zoning maps and change them from time to time. Boards of appeals must be confined to single exceptional instances for making variances in permits.

E. M. B.

PLANNING NEIGHBORHOOD UNITS

Zoning and platting control of the unbuilt area should be concerned not so much as has been the general practice with the size, shape, and use of the individual lot as with that of developing self-contained communities in which all community needs will be taken care of. The block pattern is in many respects more important than that of the lot, and the neighborhood pattern more important than that of the block. It is the block pattern that will largely control economy in street costs and in the creation of neighborhood play-parks.

Zoning and platting and street-construction control should be one and indivisible. It is fundamental that at the time the raw land is cut up into streets and building lots, the completed community or neighborhood unit should be visualized with all its characteristics and requirements. It is almost as essential that there should be neighborhood parks as that there should be local streets. Substantial savings in street improvement and permanent maintenance costs can be effected by scientific block and neighborhood planning.—From *Neighborhoods of Small Homes* by Robert Whitten and Thomas Adams.

LEGAL NOTES

Conducted by FRANK BACKUS WILLIAMS

RECENT ZONING DECISIONS

A clause in a zoning ordinance permitting business on the front of a lot and restricting the rear to residence is unreasonable. Where a zoning law is unreasonably applied, the property owner's failure to appeal to the zoning board before contesting its validity is immaterial.¹

Under a village ordinance it was provided that on a corner lot in a business district there should be a side yard along the side street lot in all cases where such line is substantially the continuation, without intervening streets, of the street lot line of lots in an adjoining residence district, or of adjoining lots in a local business district on which a front yard is required by the ordinance.

HELD,² that the village was authorized to pass the ordinance, without any legislative authority, except a general provision allowing it "to lower congestion on the public streets, to promote public health, safety and general welfare, conservation of property values, and the general trend and character of buildings and property development."

HELD, also, that the ordinance was valid although it applied only to corner lots.

The interest in the interpretation placed by the New Jersey courts upon the Constitutional Amendment of that state authorizing zoning, and the statute passed under it, is so great that the interpretation placed upon the case of *Jannarone v. Board of Adjustment of Nultlye*, 153 Atl. 256, by a New Jersey authority on zoning is well worth quoting. Of this case Spaulding Frazer, in *New Jersey Municipalities* for August, 1931, says:

It establishes three interesting propositions: first, that the Board of Adjustment was absolutely limited to the making of variances under Section 9, Subdivision 3, in respect of lands abutting a district where such use is authorized; secondly, it reaffirms the judicial nature of the Board of Adjustment proceeding and the principle that the court will not interfere therewith unless without support in fact or law; and thirdly, that constitutional objections, either under the State or Federal constitution, no longer lie since the adoption of the constitutional amendment. As to the attitude of the courts in the review of actions by the Board of Adjustment, see also *Weberlin vs. Wigton*, 153 Atlantic, 104.

¹Georgia.—*Fauss v. McConnell*, 157 S. E. 625.

²Michigan.—*James S. Holden Co. v. Connor and Baker*, Building Commissioners of the Village of Grosse Pointe, Circuit Court, Wayne County, Apr. 25, 1931.

BEES IN RESIDENTIAL DISTRICT

Under the Baltimore zoning ordinance the court has ruled that the keeping of three hives containing 150,000 bees in a residential district, being manufacturing, is illegal. The articles in the *Baltimore News* and *Sun* on this subject are amusing but not without real importance to the student of zoning law and practice.¹

RESIDENCES IN INDUSTRIAL DISTRICT

Two recent zoning regulations, those of Hampton, Connecticut, and Croton-on-Hudson, New York, forbid or place severe restrictions on residences in industrial zones. Such restrictions, although they would seem to be legal, are unusual, but might in some cases be most useful.

RECENT LITERATURE

The list of planning literature appearing since the July Notes is a long one, and therefore must be given here briefly in spite of the importance of many of the items.

AVIATION

The advance program of the meeting of the American Bar Association at Atlantic City, N. J., September 17-19, 1931, contains a report of the Standing Committee on Aeronautical Law, submitted to the Association for appropriate action by it. The report considers such subjects, of importance to the city planner in the legal field, as the ownership of the air space above land privately held, and the rights of transit, including access to airports; the right of municipalities to acquire the land for airports, and improve and police it; the right to zone the land in the neighborhood of airports; and the rights of landowners in cases of invasion of their land and the air space above it.

PLAYGROUNDS

With its August issue the *National Municipal Review* sends out a pamphlet on "Standards of Play and Recreation Administration," with an appendix with regard to "Legal Machinery Necessary to Carry Out the Principles Advocated in the Report."

ZONING IN DENVER

The Sixth Annual Report of the Board of Adjustment of Denver outlines the doings of that body for 1930, giving, as usual, a summary of decisions of the board, of considerable general interest, with illustrations which add to its value.

¹See also discussion by Mr. Edward M. Bassett on p. 265 of this issue.

ZONING IN CHICAGO REGION

Those interested in zoning in Chicago and the 78 cities and villages round about it will find useful the bulletin of the Chicago Regional Plan Association, giving in tabular form a "Charter Summary of Zoning Ordinances in the Region of Chicago."

PLANNING IN MASSACHUSETTS

Bulletin No. 26 of the Massachusetts Federation of Planning Boards is a report of its Seventeenth Annual Conference held in Boston, September 30 and October 1, 1930. The Conference was addressed by Mr. Dan H. Wheeler, Division of Building and Housing, U. S. Department of Commerce; Edward M. Bassett, Esq.; Mr. Lawson Purdy; and many well-known Massachusetts planners. Much attention was given to the work of the Billboard Law Defense Committee in its defence of the control of outdoor advertising before the courts.

ZONING AND PLANNING IN THE UNITED STATES

The United States Department of Commerce has issued four reports of considerable value: two on zoning, and two on planning. The first zoning report is a "Survey of Zoning Laws and Ordinances adopted during 1930" in which is included a recent report of the Department on "Airport Zoning and Eminent Domain." The second zoning report is called "Zoned Municipalities in the United States." Both reports contain summaries and tables of statutes and ordinances. The planning reports are called "A Tabulation of City Planning Commissions in the United States" and "Survey of City Planning and Related Laws, in 1930."

THESIS ON ZONING

An article on zoning, prepared by Mr. C. William Brooks, Jr., in behalf of the Board of Zoning Appeals of Baltimore, appears in the *Baltimore Daily Record* of August 13, 1931. It is interesting to note that this article was written by Mr. Brooks as a Law School thesis.

BILLBOARDS

THE MASSACHUSETTS BILLBOARD CASES

Of interest throughout the country in the nation-wide efforts to exercise more efficient control over outdoor advertising are the fifteen billboard cases before the Supreme Court of Massachusetts. The cases were brought by the billboard interests to test the validity of the regulations promulgated under a Massachusetts Constitutional Amendment, authorizing the passage of laws for the purpose. A similar Constitutional Amendment is pending in the State of New York.

In their slow progress to the Supreme Court of the United States the cases were referred by the Massachusetts Court to a Master for a finding of facts. His report is a preliminary victory for the advocates of stricter billboard control.

An excellent article on this report, by Mr. Albert S. Bard, appears in the August issue of the *National Municipal Review* in which, as a preface to a careful analysis of the Master's report, Mr. Bard says:

Briefly summarized, the master finds, among other things, that the rural billboard is a distraction as well as an obstruction to vision, and therefore a menace to traffic; that in residential neighborhoods such commercial intrusions as signs and billboards are offensive and obnoxious to reasonable persons, and seriously depreciate property values; that such intrusions are damaging to places which are frequented by the public chiefly on account of their beauty or historic interest; that such intrusions are damaging to the public welfare by reason of their damage to the scenery and to the amenity of places and to property values; that the restrictions and regulations framed by the Massachusetts Division of Highways, acting under the police power of the state, were framed with these considerations in view and are reasonable in themselves; that in so far as aesthetic elements have entered into such restrictions and regulations, they have "a real and economic value to the Commonwealth and to its citizens"; and that such restrictions and regulations may reasonably be applied to existing boards not conforming to the later and more restrictive regulations, although it means that a large proportion of existing boards must be moved.

UNITED STATES REPORT

Of great aid to those interested in the subject of billboard control are two recent reports issued by the United States Bureau of Public Roads. The first is called "Compilation of Laws of the Several States, in Force on May 1, 1930, dealing with the Regulations of Outdoor Advertising"; and the second, being a brief summary of some of these laws, is entitled "State Laws Governing Advertising Signs on Highways."

RECENT DECISIONS WITH REGARD TO ESTHETICS

The case of *Perlmutter v. Greene*, Superintendent of Public Works, in the Supreme Court of the State of New York (140 Misc. 42) has aroused so much interest that the opinion of the Court is here given in full:

Plaintiffs seek to obtain a permanent injunction restraining the defendants from erecting a screen upon the property of the State of New York immediately south of the east approach of the Mid-Hudson bridge and in front of a piece of property of which the plaintiffs are the lessees.

The plaintiffs intended to erect on the leased property an advertising sign. The defendant has so erected its screen as to prevent motorists using the bridge from seeing the sign.

In the defendants' brief they maintain that the object of placing the screen in its present position is to prevent motorists from seeing the sign and thus afford no reason for their taking their eyes off the wheel.

I am satisfied that this position is an afterthought. The original motive was purely esthetic.

The authorities relating to the erection of screens and fences upon private property cannot be construed as precedents in an issue between the public and a private owner.

I do not believe that the state has any right to build screens along its highway, thus shutting out the view of the adjacent owners or the view of travelers upon the highway of adjacent property, unless the screens are erected in furtherance of a highway purpose. It cannot be claimed that the erection of this screen is a highway purpose within the act, unless the Court should find as a matter of fact that it was erected for the purpose of safeguarding the motorists, a fact which I refuse to find.

It is contended that under the police power of the state this screen may be erected. Courts have gone far in upholding the police power, but never to the extent demanded here. Unless there is an express right granted by the Legislature to do this act, the Court would not be justified by implication in holding that the defendant possessed that power. If this were permitted in one instance it might be done in every instance where the Superintendent reached the conclusion that a particular type or form of building attracted the attention of motorists, and any part of the highway might be screened in the discretion of the Superintendent.

I am greatly in sympathy with the effort to remove obnoxious signs along the public highway, but it is recognized that we cannot prevent their erection on private property and a decision upholding the right of the Superintendent to erect screens would not result in the solution of the problem. With the adoption of the proposed constitutional amendment [similar to that in Massachusetts allowing the State Legislature to pass laws regulating billboards for esthetic reasons] the problem would be solved, but not otherwise.

The prayer for the relief demanded in the complaint is therefore granted.

Cases involving the validity of statutes creating Art Commissions, whose right it is to pass upon the artistic merits of municipal structures, and buildings on or over public highways, are rare. Such a law, creating the Municipal Art Jury for Philadelphia, Pennsylvania, was upheld in the case of Walnut and Quince Street Corporation v. Mills, 154 Atl. 29. The opinion refers to the power exercised by the Art Jury as the police power. It would seem rather to be the power of the municipality to deal with property owned by it.

F. B. W.

There is not a single thing in this city that you need that you cannot do if you make up your mind that you need it; you will never establish a city under the feeling that you cannot do things. A way will come, and if your present laws stand in the way, secure the best lawyers and get them busy devising laws that will meet the situation.—GEORGE F. KESSLER.

N. C. C. P. & A. C. P. I. NEWS

Conducted by FLAVEL SHURTLEFF, Secretary

INSTITUTE FALL MEETING

The Fall Meeting of the American City Planning Institute will be held in Ann Arbor, Michigan, on October 9, 1931. It will be a joint session with the American Civic Association, which is holding its Fifth Traveling Annual Meeting in the Detroit region from October 5 to 8, and the Michigan Planning Conference, which is having a two-day session in Ann Arbor, October 8 and 9.

The general subject for the Institute discussion will be "What Can Planning and Zoning Do to Make Better Roadsides?" Mr. Albert S. Bard, Counsel, National Council for Protection of Roadside Beauty, will present a "Plan for Zoning Classification of Private Property Along Rural Highways." Mr. Jacob L. Crane, Jr., will discuss Mr. Bard's plan and other zoning proposals and relate his discussion to state planning. Mr. Tracy B. Augur's subject is "Location, Design, and Landscape Treatment of Rural Highways." There will be morning and afternoon sessions and a luncheon at which the members of the Institute with recent experience in Russia will be asked to tell of their adventures.

"THE CITY OF TO-MORROW"

The National Conference on City Planning has secured a copy of the film "The City of To-morrow" which was produced in Germany for the purpose of spreading modern ideas and ideals of city planning among public officials, business and civic organizations, clubs, and educational institutions. This copy of the film has been obtained for use in the United States through the generosity of Mr. Ferdinand Thun of Reading, Pennsylvania.

The film was shown in Rochester during the annual session of the National Conference on City Planning and created much interest. It can be followed very intelligently by an audience which does not understand German, but its value is increased if accompanied by a preliminary short talk or by explanation during the showing of the film.

Inquiries about securing the film should be addressed to the National Conference on City Planning, 130 East 22nd Street, New York City.

BOOK REVIEWS & LISTS

Conducted by THEODORA KIMBALL HUBBARD

BUILDING HEIGHT, BULK, AND FORM. *How Zoning can be used as a Protection against Uneconomic Types of Buildings on High-Cost Land.* By GEORGE B. FORD, late General Director, Regional Plan Association, New York. Assisted by A. B. RANDALL and LEONARD Cox. Cambridge, Harvard University Press, 1931. 188 pages. Photographs, plans, diagrams, charts, tables. 10 x 7 inches. Price \$3.50. (Harvard City Planning Studies, Volume II).

This book deals primarily with the height and form of office buildings and apartments. Completed only a few days before Mr. Ford's death, it adds a final contribution to a splendid life record of achievement and service.

Mr. Ford's study proceeded, as he states in his introductory chapter, with the hope that research would uncover the data that "would prove quantitatively the dollars and cents value of sunlight, light, air, privacy, outlook and freedom of movement"; and that such data would give a new approach to the determination of the most practical and effective form for city buildings.

As the result of his study, Mr. Ford came to the conclusion that "light is the most important factor in determining the amount of open space about buildings." He states, "The convenience and economy in a concentration of large-bulk buildings in a small area seem so far to outweigh the inconvenience of the ordinary short periods of traffic congestion as to make such congestion a minor factor in determining the desirable maximum bulk of office buildings."

Office buildings are erected to supply an existing demand for office space. The amount of office space demanded and supplied depends on the size and character of the city. Whether the buildings erected to supply a given demand for office space are all ten stories in height or all twenty stories in height, will make no difference in the number of subway trains required to serve the area or in the required capacity of arteries serving through traffic as distinct from local vehicular traffic.

Existing lot and block layouts are often unsuited to modern needs. In central areas we need larger blocks and much wider streets,—wider streets but fewer of them. Each super-block should be developed as a unit with tower buildings occupying not more than about 40 per cent of the lot area at the ground level or more than about 20 per cent of the lot area above the 60-foot height level. Mr. Ford does not indulge in such radical and presently

impractical proposals as the above, but he does propose definite and fairly drastic changes in existing methods of controlling the height and form of office buildings and high apartments. His principal innovation is a requirement of side yards for both office and apartment buildings which are above a height equal to the width of the street. He would also increase the requirements for rear-yard and court space over those that are usually contained in zoning ordinances.

Mr. Ford shows clearly that good planning in office-building construction should follow the example set by the builders of the New York Life Building and the Empire State Building in New York City in setting back the floors above the fifth and compensating for the resulting loss of space by increasing the height of the tower. By this process poorly lighted space is replaced by well lighted and higher-rent space in the tower. The implication is that there can be no serious economic objection to a much greater restriction of the height of buildings at the street line provided opportunity is afforded to build high towers.

For garden apartments Mr. Ford recommends 15-foot minimum side yards, 30-foot minimum rear yards, and a minimum setback or front yard of 50 feet measured from the center line of the street. He would also control building bulk and population density by the requirement that "the total gross floor area of all floors should not exceed the area of the lot." This would mean, aside from yard requirements, that a one-story apartment could cover 100 per cent of the lot, a two-story apartment 50 per cent, a six-story apartment $16\frac{2}{3}$ per cent, etc. This is similar in effect to a few zoning ordinances that have required one square foot of open space for each two square feet of gross floor area. This latter form has a slight advantage over that proposed by Mr. Ford. It stresses the importance of open space for garden and play-yard purposes, in addition to its importance in furnishing light to the rooms of the building.

This research volume is full of interest to the city planner. The problem studied is many-sided and the author has dealt with it in a masterly manner. He stresses also the need of additional research on many of the leads that he has uncovered. He has approached the economics of high-building construction from the standpoint chiefly of the individual plot with its established land value and its predetermined block and street layout. A companion research might attack the problem from the viewpoint of the design, anew, of a central business area for a large city. What form would this hypothetical city take? Perhaps by this thoroughly impractical method some very practical results could be obtained that would as profoundly affect the form of the future central city as the planning and building of Radburn are already influencing the design and form of the local community or neighborhood unit.

ROBERT WHITTEN.

NEIGHBORHOODS OF SMALL HOMES: Economic Density of Low-cost Housing in America and England. By ROBERT WHITTEN, President, American City Planning Institute, and THOMAS ADAMS, Associate Professor of City Planning, Harvard University School of City Planning. Cambridge, Harvard University Press, 1931. 205 pages. Photographs, plans, tables, charts. 10 x 7 inches. Price \$3.50. (Harvard City Planning Studies, Volume III).

The very title of this book—connoting as it does the *community* concept, the *spaciousness* concept, and the concept of the *home* as contrasted with the slum or the tenement—gives effective emphasis to three of the most impelling ideals of the forward-looking city planner or real estate developer.

The book itself is an admirable example of effective presentation, in text, chart, photograph, map, and tabular form, of a mass of data, not heretofore generally available, gathered and analyzed for the United States and England respectively, by the two eminent authors.

As a factual basis for Mr. Whitten's study, an attempt was made to determine:

(1) The percentage of the total number of families that will be effective in creating an economic demand for houses or apartments in the various cost classifications.

(2) The extent to which houses are now being constructed in the lower cost classifications.

(3) The cost of the raw land and how such cost is affected by the value of the houses for which it is deemed suitable and by the normal number of houses to the gross acre.

(4) The present practice as to lot size, improvement cost, and improved-lot cost; and the normal relation between the cost of the fully improved lot and the total cost of the house and lot.

(5) Present subdivision practice and the effect of density on acreage values and on lot values.

With this factual background the next step was to set forth certain standards of individual lot and community development deemed suitable for small-house urban areas.

The results of this research should prove of great value to those who have been urging, without heretofore such adequate factual support, that there is no economic need for the land overcrowding so common in our American cities. On this subject Mr. Whitten states that "if the problem is not that of the individual tract of land but that of determining the normal size of lot for the low-cost houses of a city or state, it is not at all clear that a reduction in the normal width of the lot, say, from 45 feet to 30 feet, will produce any reduction in the cost at which the small house can be produced and sold."

An important recommendation in the American author's concluding chapter is that neighborhood units be planned for permanence rather than for convertibility. By such planning and by permanently restricting the land by deed and by zoning to the type and intensity of use for which it is devoted and is most suitable, the author points out that it should be possible to alter the present tendency to change to a more and more intensive use, with increasing land values but depreciated building values and with a sacrifice of all community values. And Mr. Whitten adds:

"In determining lot and housing standards consideration should be given to the probability of a continuance of the trend toward higher wage and living standards. The benefit of the doubt should be given to the wider rather than to the narrower lot, to the larger rather than the smaller play-park area, and to the lower rather than the higher housing density.

"The trend toward higher housing densities should be resisted. It is easy to increase density, but very difficult to lower it after the higher density has become normal to a community. The higher densities create correspondingly higher acreage and lot values. The density cannot usually be lowered without decreasing the existing land values. This is always difficult and generally impractical."

Professor Adams—as he is now known at Harvard—selected for investigation the elements of cost that enter into the building of houses for the groups of lower income in England. Five of the chief housing enterprises of the London County Council and eight other neighborhood developments—four in Letchworth, two in Welwyn, one in Kemsley, and one in Lambeth—received detailed study. Information thus obtained is summarized in Mr. Adams's half of the book, and deals with:

- (1) The cost (exclusive of cost of land) of building an adequate 4-room, 5-room, or 6-room house for families in the groups of lower or medium income.
- (2) The relation of the cost of the three elements of (a) lot, (b) local improvements, and (c) building.
- (3) The size of the lot necessary to admit sufficient light, air, and sunshine to the house.
- (4) The size and cost of the lot and the house, and the character and cost of such public services as streets and sewers which may be provided without imposing too heavy a burden on the class of persons for whom they are designed.
- (5) The cost of street developments, of sewerage, and of other public utilities under different systems of planning.

Part Two also contains a Summary of Housing Legislation and Conditions in England and a concluding discussion of The General Problem of Planning Residential Neighborhoods and Controlling Building Densities. As

a result of his studies, Mr. Adams sees "little cause for having any higher density than eight houses per acre in order to keep sufficient land open for building." Indeed, he estimates that "at eight families to each acre, it will take well over fifteen centuries for England and Wales to occupy buildable land representing about half of their area, even assuming it will be practicable for them to have a concentration of about ten times the present population."

While appreciating the deep digging which the two authors have done into some of the fundamentals of the economic density of low-cost housing, the present reviewer regrets that the discussion never quite touches rock bottom. A recognition of the problem by Mr. Whitten is indicated when he calls attention in his concluding chapter to the fact that "with present wage standards, living costs, and housing costs, it is impossible to build good single-family houses for the 36 per cent of the families who can spend for housing (not including heat) not over \$500 a year." And in Great Britain, notwithstanding subsidy commitments for government housing since 1919, estimated by Mr. Adams at more than \$2,580,000,000, his study shows that there may be three or four million persons still living in slum houses,—houses that are "dirty, infested with vermin, and deficient in sanitary conveniences which modern standards demand. . . . Besides this, there are certainly millions of people living in overcrowded areas in houses that are not actually unfit, but that cannot properly provide for three or four families the accommodation and convenience that was originally intended for one."

The volume under review might have been entitled "Neighborhoods of Small Homes—for Not Too Small Incomes," for it suggests no economic way out of the slums for the low-income groups of wage earners.

Doubtless neither author was asked to tackle this, the most baffling phase of the housing problem. And perhaps researches into the aid which land-value taxation, scientifically applied, could give in its solution, and suggestions as to how the day of this fundamental reform might be hastened, are to be the theme of a future volume in the series of Harvard City Planning Studies.

HAROLD S. BUTTENHEIM.

REGIONAL AND TOWN PLANNING IN PRINCIPLE AND PRACTICE.

By W. H. McLEAN. London, Crosby Lockwood & Son, 1930. 148 pages. Photographs, maps and plans, diagrams, charts. 10 x 7½ inches. Price 21 s. net.

Although this book considers the broadest aspects of regional and town planning,—and even national and international problems,—it is perhaps of greatest interest to American readers because of the illustrations of planning principles drawn largely from the author's unique experience in Egypt, as municipal engineer for Alexandria and Khartoum City, and engineer-in-chief for the Egyptian Ministry of Interior, Local Government Section.

From the preface we learn that much of the text has been developed from a series of advanced lectures in town planning for the University of London in 1927, as well as on the author's Ph. D. thesis in the University of Glasgow. The author's experience brings to the fore practical problems of utilities and drainage sometimes slighted in general treatises written from points of view other than that of the municipal engineer; and these important and practical matters are related in the book to theoretical considerations of economic advantage and desirable political amenities between administrative units.

The national development program for Egypt and excerpts from building regulations for Khartoum and Alexandria, as well as Jerusalem (for which plans were also prepared by Dr. McLean), constitute an appendix of special value on library reference shelves, while the bibliography indicates rather the basic study for this book than a selection for further reading.

To already available literature representing the points of view of other British planners with tropical and sub-tropical experience, it is interesting to have added this exposition of modern Egyptian problems.

T. K. H.

ZONING IN THE UNITED STATES. Edited by W. L. POLLARD. The Annals of the American Academy of Political and Social Science, Volume 155, Part II. Philadelphia, the Academy, May, 1931. 230 pages. Plans, charts, tables. 9¼ x 6 inches. Price \$1.00.

This volume, combining happily the viewpoints of West and East on zoning problems, is an indispensable addition to planning and zoning literature and an invaluable aid to the citizen novice anxious to be enlightened on what zoning is and has done. The Editor says that in the roughly fifty-fifty division of the thirty-two articles comprised in the editorial scheme (planned in consultation with an advisory group including Gordon Whitnall, Donald Baker, Charles Diggs, A. E. Williamson, and C. J. S. Williamson), perhaps convenience has led to an over-preponderance of Western views in proportion to zoning achievement. All will welcome, however, these Pacific Coast opinions. There cannot be too much open discussion of zoning by people all over the country who are constantly learning by experience.

In the book we find the names we should expect in any authoritative epitome of zoning matters: Bassett, Williams, Bartholomew, Whitten, Gries, and others; and Harvard University, through Miss Katherine McNamara, has contributed a well-rounded selected bibliography.

We are glad that the American Academy of Political and Social Science has added another notable coöperative volume to its series on contemporary planning problems, already of historic as well as practical interest.

T. K. H.

OTHER NEW PUBLICATIONS RECEIVED

- Abercrombie, Patrick, Sydney A. Kelly, and T. H. Johnson.** Sheffield and District regional planning scheme. Prepared for the Sheffield and District Joint Regional Planning Committee. Together with a Mining report by Messrs. Childe & Rowand and A. Smith Denton & Co. London, Hodder & Stoughton, Ltd., 1931. Price 2s. 6d.
- Adams, Thompson & Fry.** Borough of Bexhill town planning scheme: report on the general development plan. London, 1930. Price 10s. 6d.
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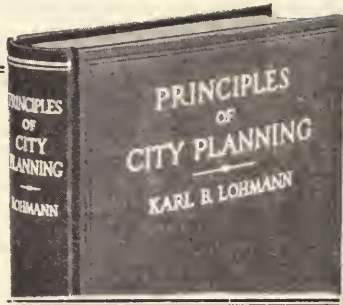
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